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Diseases of SPECIAL OCCUPATIONS.

No. III.

DISEASES OF COLLIERS IN SOUTH LANCASHIRE.

By WILLIAM I. COX, Esq., M.R.C.S., etc., Corresponding Member of the Epidemiological Society.

[*Concluded from page* 492.]

CLASS *e*. *Renal diseases*, especially that of which the chief characteristic is albuminous urine, are not uncommon. Sometimes this malady seems to date its origin from the receipt of mechanical violence to the back and loins, to which colliers and miners are necessarily very liable; and yet more frequently, perhaps, it is in great measure induced by long persistence in the unnatural and irksome postures which these operatives are compelled, under often occurring circumstances, to assume during their time of labour; crouching down, doubled up, as it were, in a low-roofed "stall" or chamber; sometimes twisted to one side, with the spinal muscles and column painfully stretched for a considerable period of time; yet obliged to exert considerable muscular force in these positions. It is not surprising to the physiologist that the kidneys should ultimately suffer from this. Very commonly, however, the renal mischief is associated with hypertrophied heart; and might doubtless be too often traced to a common cause—habitual intemperance. We must bear in mind that all these causes, predisposing and exciting, are frequently in operation conjointly.

Class *f*. *Cutaneous affections*, particularly such as arise for the most part from want of cleanliness, are often met with among colliers, and are very intractable. This peculiarity is, no doubt, attributable partly to the prolonged continuance of the exciting cause; and partly to the deleterious influence of the privation of pure air and sun-light over the functions of the skin.

On the whole (and in accordance with statistical tables carefully kept by myself and others), it appears that *pulmonary* and *cardiac* diseases number the most victims among the colliery operatives. There is certainly a larger number of persons suffering from asthma, bronchitis, etc., in the coal districts of South Lancashire, in proportion to the population, than in any other locality with which I am acquainted. And that this is owing to the evils specially attendant on the lives of the colliery operatives—the nature of their work, their personal habits, and physical and moral characteristics—and not to any supposed influence of meteorological phenomena in this district, is demonstrable from two facts:—1. The factory operatives resident in the same locality, and of course subjected to the same atmospheric influences, are not attacked by the maladies in question in anything like the same ratio; 2. We have it on reliable testimony that the colliers of Durham, Newcastle, and Glasgow, are sufferers to a nearly equal extent from the same diseases.

III. PREVENTION OF COLLIERS' DISEASES.

The prevention of disease is fully as reliable a testimony of professional skill and scientific knowledge as its treatment; whilst it is generally considered to constitute a surer evidence of the possession of that disinterested and noble philanthropy which should ever characterise the disciples of physic. No medical practitioner whom Providence has caused to reside and exercise his art for any length of time in the midst of a mining district can, I should suppose, fail to observe and deeply to deplore the great existing amount of evil in the lives of the operatives; and the sad proportion of bodily disease and moral corruption springing from remediable (or, at all events, mitigable) causes, associated with their daily life, labour, and habits. By the dispensations of the All-Wise, the laws of our *physical* being, and those by the operation of which our *moral* nature is regulated, are so nicely balanced, so admirably linked together, that any infringement of the one is speedily productive of a baneful effect in the proper observance of the other; and, the equilibrium once being destroyed, the reaction of evil from each to each goes on, multiplying mischief, until the body and the mind are alike tainted and corrupt. Hence we always find associated corporeal and spiritual uncleanness. Hence it is that a human being, living constantly amongst dirt and filth knows no self-respect; or, at all events, he speedily gets rid of so inestimable a possession. Hence it is that such an one shuns the society of his cleanlier and more decent fellow-men, and feels cowed when in their company. Hence it is notorious that the vices of drunkenness and sexual incontinence, and shameless depravity, the faults of a quarrelsome, violent, peevish disposition, and a general recklessness of mind, are the usual characteristics of persons inhabiting dirty ill ventilated houses; whilst it is equally as patent a fact, that clean, airy, well drained habitations, are favourable to the maintenance of health, and the development of moral habits. The almost certain effect of the foul air alone in so many of the dwellings of our artisans—dwellings offensive to every sense, and full to repletion of every uncleanness and horror—is to cause a general debility of the system—a condition of body in which the slightest exertion induces unnatural fatigue; and this latter a querulousness of mind, and a morbid craving for strong drinks. Thus vicious habits of one especially fatal class are engrafted, and too often last for life; laying the foundation of wide spread vice and woe.

I will now proceed very briefly to suggest a few measures towards the amelioration of the bodily and moral condition of the colliery operatives. For a more lengthened detail of these, I must refer the reader to my papers in the *Sanitary Review*.

1. The establishment of baths and wash-houses in the immediate vicinity of the coal-pits.
2. The erection of improved dwellings for the habitation of the operatives.
3. A good water supply to the said dwellings.
4. The entire abolition of female labour.
5. Schools for children: to be compulsory, if found to be necessary.
6. Classes and lectures for adults of both sexes.
7. The establishment of savings' banks and mechanics' institutes.

All these things are loudly called for; and, to be successful, must be thoroughly and efficiently worked out. I believe that the erection and constant use of baths in the neighbourhood of the pits would go far to obviate many of the evils to which I have alluded. That perfect contempt for cleanliness of body, and aversion to the use of water for the purposes of ablution, which is so extraordinary and peculiar to colliery operatives, would then gradually disappear. Their moral influence would also, I am convinced, be very great. The scandalous licentiousness and scornful indifference towards the maintenance of sexual modesty, which, I grieve to say, is strikingly characteristic both of men and women in these coal districts, is no doubt in part attributable to the odious and common practice of the young persons of both sexes stripping on their return home, and performing their apologies for ablution in a state almost of nudity, in the same "house-place", and in open view, not only of parents, but of unmarried brothers and sisters, and of adult lodgers. I have frequently been a disgusted witness to these revolting spectacles. What must be the effect on the mind of the untaught girl of this familiarity of exposure? All such abominations would be at once swept away by the establishment of baths and wash-houses at the collieries.

A vast improvement in the social habits, and consequently

in the health of the operatives, would certainly be effected by their being provided with wholesome, well ventilated, well drained dwellings, and a cheap thorough water supply, where that great desideratum is deficient. In the coal fields of South Wales and Monmouthshire, the colliers are generally resident in commodious cottages, built by the masters in the neighbourhood of the works. It is to be regretted that this system is not generally adopted in Lancashire. But if the home of the workman be not an object of care to the master, it will be idle to attempt bettering his condition, with any prospect of permanent benefit resultant from such endeavour. We can never hope (consistently at least with the teachings of physical and psychical science, the results of experience, and the revelations of religious truth) to plant successfully in the habitations of wretchedness, redolent of the atmosphere of an earthly hell, the virtues of heavenly origin. Self-denial, temperance, chastity, forbearance, good-will towards men, universal charity, these have nought in common, nor can exist in association with the squalid court, the reeking sewer, the polluting air, stagnant in homes of physical and moral corruption.

Surely, also, it is time that our legislature should abolish for ever the abomination of female *employées* at the "brow" of the shafts. The evil effects of this revolting usage are not confined to the demoralisation and destruction of the sense of female shame, which it directly produces; nor to the persons of the female operatives. It tends indirectly to lower the moral status and bodily welfare of the men with whom they live in marriage or concubinage. And, this sad state of mind and morals reacting on their physical condition, their unhappy offspring necessarily suffer from the degeneracy of their parents. Moreover, they leave their children daily to the care of strangers, who drug them with narcotics to avoid the trouble of their supervision; and the mortality and bodily and mental poisoning thus induced among the offspring of the female workers in collieries, is nearly as great as that so notoriously existent among the neglected children of factory operatives. Until an Act of Parliament shall put a stop to the evil by removing one of its principal causes, a powerful check might still be given to the maintenance of the system by the masters refusing the employment of women; and, in other ways, showing their entire disapprobation of so odious a custom. Moral suasion in this, as in so many other matters, would do much if steadily put in force.

My experience in the peculiarities of temper and character in colliers, has quite convinced me that it is nearly hopeless to leave the training of the rising generation in the hands of their natural protectors. The parents, not having been themselves the recipients of education, are prejudiced against it, and have no faith in its advantages. We have been long waiting (and probably shall yet have to wait) the advent of a government plan of education—rendering the school tuition of the children of colliery operatives compulsory at a certain age—which we may reasonably confide in to disperse the darkness of ignorance and depravity, which still broods over the coal fields of the north. In 1844, the Rev. Mr. Clay, of Preston, found that forty per cent. of the persons admitted into the House of Correction were ignorant of the Atonement, and of the meaning of the words "virtue" and "vice". In Mr. Tremenhere's report for the same year, we find that in South Lancashire fifty-nine in one hundred persons were unable to read or write. Have matters improved since then? No. From statistics which I collected in 1855, and also from other trustworthy sources, I found that among the colliers in the district about Wigan one only in four was able to read. Can we then feel surprise that dirt, sensuality, waste, improvidence, wickedness, should be rife in such a locality? Is it foreign to the immutable relations of things, that a large amount of disease should also be coexistent with the above—naturally resulting from them indeed—and therefore in a great measure removable? Entire ignorance of physical laws leads of course to their daily infringement; as in like manner, a blunted and imperfect perception of the moral laws is associated necessarily with the constant violation of these. Disease is the inevitable result of both.

But our efforts at amelioration should not be confined to the rising generation. Adults should likewise be instructed by appropriate teachers—evening classes, lectures, meetings for mutual recreation and improvement. Especially females should be taught, not frivolous accomplishments—not music, or crochet, or embroidery—but cooking, the making of children's clothes, in short, the whole art of domestic economy on a humble scale. I would suggest, with regard to the lectures, that these should be delivered by the clergy and medical men of the district; that they should consist of simple discourses on popular science, and on the ordinary phenomena of the domestic and work-day life of the hearers; the style to be familiar, devoid of all technicality, and adapted to the listeners' comprehension.

The establishment of savings' banks and provident associations would also have a very beneficial effect in teaching habits of saving, and consequent self-denial; in inculcating a feeling of self-respect, and creating a sense of property. Much there is in the power of the masters to effect for the bodily and moral welfare of their men. It is for them to antidote the beer-shop, to offer something pleasing, intellectual, or at all events harmless, in lieu of the incitements of a degraded sensualism. Mechanics' institutes and reading-rooms will prove useful agents in so doing.

IV. TREATMENT OF DISEASES.

Very little is needful, or indeed excusable, on this head. The application of general principles will be found successful. I may remark, however, that the abstraction of blood, even in cases which among almost all classes call for its adoption, is rarely necessary with colliers. Indeed, they bear it very badly. I have as yet not had recourse to it in any case of pleurisy or pneumonia occurring among them. With reference to the "black lung", I have generally found it the most judicious plan to do but little, watching carefully for inflammatory symptoms; but avoiding all medicinal treatment, excepting complications arise; or the consequences of the morbid deposit have become apparent. For the chronic asthma, which I have described as being so very frequently met with among the colliers, and which is often associated with extensive emphysema (vesicular), and with the "black lung", I have found the employment of chloric ether and conium, or ammonia and opium, the most efficacious treatment. In the management of the numerous cases of rheumatism, which have fallen under my notice among the colliery operatives, I have found, after considerable experience of many much vaunted remedies, that the fibrous variety of the disease is best combated (in the absence of heart complications) by the exhibition of the bicarbonate of potash in large doses, with an opiate at night; that the best treatment of the synovial kind is, in recent cases, the administration of acetate or nitrate of potash, or phosphate of ammonia with opium; in chronic cases, quina or iodide of potassium with acetic extract of colchicum. The renal diseases call for no particular treatment. The skin affections will yield more certainly and rapidly to the arsenical plan of treatment introduced by my friend Mr. Hunt (and now well known to the profession) than to any other.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

I. ABSCESS OF TIBIA WITHOUT PAIN: TREPHINING: RECOVERY.

Under the care of Alexander Ure, Esq.

[*From Notes supplied by* Ernest Hart, Esq., *House-Surgeon.*]

W. R., aged 13, a fair, healthy-looking lad, well nourished, came under the care of Mr. Ure for disease of the right tibia. During four months there had been considerable swelling and induration over the right shin, just above the ankle, consequent upon a blow. He had never complained of pain or startings in his sleep, but walked lamely. An abscess formed, and at the bottom of the resulting sinus bone could be felt, but it was not denuded. There was marked tenderness on pressure at one small spot a little below the opening. It was resolved to expose the bone by exploratory incision, and to examine and remove any diseased portion which might be found. A small opening was discovered, through which the probe was passed, breaking down a thin osseous shell, and entering the cavity of what proved to be an abscess of the size of a walnut within the substance of the tibia. This was freely laid open, and the diseased surfaces removed by a gouge. The wound has healed up well—granulating from the bottom, and the boy is now about to leave the Hospital.

REMARKS. Abscess of the bone is a disease in which English surgeons may feel an especial interest, seeing that the greatest improvement in its treatment is due to the skill of one of the most eminent of their body. This case is remarkable for the total absence of pain during the suppurative stage. The symptoms were rather those of necrosis than of abscess, the only characteristic feature being the localised tenderness above alluded to. This may be worthy of observation in future similar cases.

II. COMMINUTED FRACTURE OF STERNUM: DISLOCATION OF MANUBRIUM BACKWARDS: RECOVERY.

Under the care of ALEXANDER URE, Esq.

J. B., aged 64, a "navvie," strongly built, and of heavy frame, had fallen from a height of forty feet, and struck his chest violently against the edge of a rafter lying on the ground. He immediately became insensible, and was brought to the Hospital in a state of collapse. He was breathing heavily; and at every inspiration loud crepitus could be heard across the room, proceeding from the edges of the fractured sternum. The manubrium was dislocated backwards, having a comminuted depressed fracture of its anterior table. The second piece was also fractured opposite the third rib.

An effective retentive apparatus was improvised with the aid of hard rollers, kept in place over the sternum by a tightly applied bandage, and he was then put to bed. Ether and ammonia were called for on account of his extreme depression. He was liberally fed with milk and beef tea; and strong green tea was administered from time to time. His pulse rose, and he complained loudly of acute pain at the seat of fracture. On the second day he was bled from the arm to six ounces, and a pill of stramonium, antimony, and camphor was ordered three times a-day. The cough continued troublesome, but gradually abated. At the end of a week he showed symptoms of excessive weakness, and was allowed brandy and wine. After this he continued to do well, and in a month's time left the Hospital cured.

REMARKS. This case is worthy of note on account of its favourable termination; and it forcibly shows the importance and advantage of treating symptoms as they arise; using moderate depletion as inflammation threatens, bearing always in mind the necessity for supporting the system by a nourishing diet, and warding off extreme depression by nervine tonics. The use of green tea was attended with admirable results, and probably conduced, in a great measure, to the recovery of the patient.

ST. GEORGE'S HOSPITAL.

I. COMPOUND FRACTURE OF LEG.

Under the care of H. C. JOHNSON, Esq.

GILES P., aged 38, messenger at the Junior United Service Club, was brought to the Hospital on June 9th with compound fracture of the right leg. It seems, from his account, that he was riding a pony in a narrow street, and going rather fast, came into contact with a cab, also moving quickly, so that his leg got crushed between the wheel and the saddle. He was able to get off the pony, and was conveyed up to the Hospital; no care, however, having been taken to place the limb in a horizontal position. On examining him, it was found that he had sustained fracture of both tibia and fibula obliquely about the lower end of the middle third. Communicating with the broken bones was a wound of about one inch and a half in length, nearly on the anterior surface of the leg, slightly towards its inner border. Great displacement of the bones had taken place; and as the hæmorrhage was considerable, and compression had to be applied for some time, the fracture-box could not immediately be adapted. A few hours afterwards, the bleeding having stopped, Assalini's box was applied. The patient went on very well till June 13th, when some sloughing was noticed round the wound, and there was no free or healthy suppuration. (The wound, he said, was caused at the time of the accident; and from the torn state of the clothes, and the bleeding, this seems to have probably been the case.)

June 14th. He complained of headache. Pulse 108; tongue white; skin hot. He had very little pain, but there was a kind of forced cheerfulness about him.

June 15th. There was great drowsiness; he muttered occasionally, but was rational when conversed with. There was general feverishness. The wound looked unhealthy, with sero-sanguineous discharge from it. Pulse 132, and tremulous; tongue brown; face sallow. He was ordered to take a saline ammonia draught, with mxv of tincture of opium every four hours.

June 16. He complained of great thirst. There was frequent subsultus, and increased delirium, but he could be roused into coherency. It was found necessary, from the swollen state of the limb, and the appearance of cellular infiltration, to make several incisions in the leg; but very little discharge came away, and he was quite unconscious of the knife. Wine and chlorate of potass were now given. Towards evening his delirium increased, with some convulsive twitchings of the muscles of the face and hands; and he gradually sank, expiring about midnight.

II. REMOVAL OF LARGE (MALIGNANT?) TUMOUR OF THIGH.

Under the care of T. TATUM, Esq.

Sarah W., aged 40, a married healthy looking woman, from the country, was admitted under the care of Mr. Tatum. Six years ago, she first noticed a swelling in the posterior part of the thigh, of about the size of an orange, which she could not attribute to any cause. Since that time it had continued to increase rapidly, but was unaccompanied with any pain, the only inconvenience being the tension caused by the weight of the tumour, and her inability to sit down comfortably. The tumour was of the size of a large pumpkin, and situated at the posterior surface of the upper part of the left thigh, immediately below the nates. It was smooth, hard, and pendulous; the attachment to the thigh apparently not occupying any very great surface. Her health was very good. Accordingly, on June 4th, she was put under the influence of chloroform, and a longitudinal incision, to the extent of seven or eight inches, made over the tumour, corresponding as nearly as possible to the surface of the posterior part of the thigh. The tumour was immediately exposed, and no adhesions to the skin at the upper part appeared to exist: it was easily dissected out, the deep attachments being loose. The great sciatic nerve remained covered over by a layer of dense cellular tissue. The hæmorrhage was inconsiderable, and easily controlled: a few sutures brought the edges together, and wet dressing was applied. On examination, the tumour was found to be contained in a large cyst, that again being covered by an extraneous membrane. On cutting into the mass, a portion of it was found to be of a fibro-cystic character; another portion presented a kind of fleshy appearance, semi-transparent, interspersed with patches of a red colour, giving the idea of degenerated muscular tissue. Under the microscope, cancer-cells and exudation-corpuscles were seen in both these portions of the tumour; but no distinct traces of muscular fibre could be discovered. The main bulk of the softened fleshy part was infiltrated with fat and oil-corpuscles.

No inconvenience attended the use of chloroform in this case; and, on June 20th, Mr. Wintle, the Surgical Registrar, reports the patient as convalescent.

III. MALIGNANT DISEASE OF THYROID BODY: DEATH FROM APNŒA.

Under the care of H. PITMAN, M.D.

C. S., aged 41, came under the care of Dr. Pitman on June 1st. She stated that she had been quite healthy until three weeks previously, when she began to suffer from pain in the throat and dyspnœa. The bowels were costive; the catamenia regular; bronchitic râles were heard all over the chest; and she expectorated some blood-tinged mucus. The thyroid gland was noticed to be large and very hard. She said that it began to increase in size two years ago, but not at all rapidly. During the last three weeks, its growth had been accelerated. There was dysphagia and inability to sleep, but no pain, except when pressure was made on the throat. She was ordered blue pill and antimony every four hours; a blister was put upon the chest, and the bowels opened by senna. But no improvement in the power of deglutition took place; and she began to feel excessively exhausted from want of nourishment. Great prominence and dilatation of the right external jugular were noticed. The sputa continued tinged with blood. The dyspnœa was increased on the least exertion; and, on bending her head forward, great pain was felt in the tumour. Compound tincture of iodine and leeches were successively applied to the swelling, and the free bleeding from the latter gave some temporary relief. From June 9th to 13th, her breathing, power of swallowing, and expectoration, all improved; then more severe pain set in, and she spat up a great deal of bloody mucus. Leeches and sinapisms were applied to the throat and chest, but her

uneasiness increased. She could not swallow anything, and wasted rapidly. Paroxysms of dyspnœa came on from time to time; and in one of these, on June 21st, she expired.

The autopsy took place seventeen hours afterwards. A hard gristly tumour, of the size of a hen's egg, was found to occupy the place of the thyroid body. On the left side, at its upper part, this tumour was softer; and a cyst in it was filled with reddish glairy fluid. The morbid growth extended under the sternum for two inches, and surrounded the trachea, except at its median and posterior part. On slitting open the windpipe, one or two commencing points of ulceration were seen, and those corresponded with the softened parts of the tumour. In the lower lobe of the left lung, and in the inferior part of the right, patches of deposit similar to that in the throat were discovered. Cancer-cells were found in specimens from both these situations. No cancerous deposits existed elsewhere. The capsule of the left kidney was very adherent. In other respects, the abdominal viscera were healthy.

Remarks. This case may be advantageously compared with an accompanying report in to-day's Journal from University College Hospital, and with two former cases reported within the last fortnight, one from St. George's, the other from St. Mary's Hospital; and the same remarks, as to the inutility of operative proceedings, will apply in every instance.

IV. RENAL DROPSY: PTYALISM.

M. S., aged 41, had been suffering six weeks from swelling of the abdomen and lower extremities; and, from the commencement of this state of things, she noticed a decrease in the quantity of her urine. For most of the time she had been under the care of a medical gentleman, and was far less dropsical on admission into the Hospital than previously. She had been taking a small quantity of mercury, and was profusely salivated. There was pain across the loins, an anæmic pasty complexion, weak pulse, and dry coated tongue. The urine was loaded with albumen, and contained pus-globules and numerous vibriones. Borax and honey, in infusion of cloves, were used as a gargle; vapour baths were ordered; saline draughts were taken three times a day, and compound jalap powder on alternate mornings. She left in a month, very much relieved in all her symptoms, but with the mouth still tender.

Remarks. It was impossible to ascertain whether mercury had been given in this case to answer any particular end, as, for instance, to promote interstitial absorption in the diseased kidneys; or whether it was administered without due care, no attention having been paid to the urinary organs. At all events, it affords another instance of the intractable kind of salivation which follows the use of the drug in Bright's disease, and shews the wisdom of combating inflammatory symptoms in such cases by other than mercurial agents.

UNIVERSITY COLLEGE HOSPITAL.

I. ENCEPHALOID DISEASE OF ŒSOPHAGUS.

Under the care of J. E. Erichsen, Esq.

[*Reported by* W. F. Teevan, Esq., *House-Surgeon.*]

G. B., aged 47, a paper-hanger, was admitted on May 4th, in a very emaciated condition. His general health had been good; he had always lived in London; and had never suffered from privation. There was a visible difference in the colour of the two sides of the face. The ground tint of both was of a dirty white colour; whilst on the right cheek the capillaries were considerably injected. Both eyeballs protruded more than natural; the right eye, as compared with the left, appeared partially closed; and the pupil was somewhat contracted; the contraction being permanent.

His voice was a compound of a nasal twang and a stridulous whisper. On attempting to converse for a few minutes, he was always interrupted by laryngeal spasm. There was great fetor of the breath; the tongue was very coated; the pulse feeble, but regular, and averaging 84 per minute; the bowels were very costive. He complained of constant languor, and of perspiration after the least exertion. His hands were cold and clammy, and the perspiratory odour was almost as offensive as the breath. There was great fulness of the right side of the neck, occupying the entire posterior inferior triangle, and extending into the lower part of the anterior triangle. A mass uniformly hard and undulating, having two small projections of the size of a hazel-nut, and fixed in the neck, except just at its upper part, formed this swelling, which encroached on the trachea, and forced the right carotid considerably out of its course.

The patient stated that about nine months ago he first noticed a small hard nodule in his neck, which had gone on slowly increasing in bulk. It caused him no inconvenience until three months later, when he frequently woke in the night with sharp cutting pain in the tumour, and began to experience difficulty in swallowing. About three months after this date, he could only take bread finely crumbled. He also began to have a peculiar sensation in his right arm, which sometimes extended from the fingers to the neck, whilst at other times mere numbness of the fingers was felt.

On May 6th, Mr. Erichsen endeavoured to pass a tolerably sized bougie down the œsophagus, but could not succeed. A small one, of the diameter of a goose-quill, passed readily; and over this was slipped a bougie of the size of one's little finger. An obstruction was felt in the œsophagus, but whether dependent upon malignant disease of the tube, or upon the enlarged mass external to it, could not be determined.

The tumour was dressed with iodide of lead ointment; and the man was ordered full diet, with porter, cod-liver oil, and opiates at night, if needful.

After the withdrawal of the bougie, some blood was thrown up. On examining it with the microscope, no cancer-cells were found. An instrument was passed for the last time with some difficulty and pain to the patient two days later. Up to the 20th, he seemed rather better, and the power of deglutition improved, although the mass in the neck was larger and more elastic. His cachectic appearance became more marked, and there was rapid emaciation. On the evening of May 30th, laryngeal spasm came on, with intense pain and orthopnœa. He was much weakened by this attack, and only kept up by frequent small doses of brandy.

A drop of atropine was put into the right eye, in order to try if the pupil was susceptible of dilatation. On visiting the man an hour afterwards, the right pupil was found extremely dilated, and the left one also, but to a less extent. This dilatation lasted for two days.

On June 10th, excessive pain came on in the neck. There was complete aphonia, and almost incessant dyspnœa.

At 4 A.M. on the 12th, he died, rather from asthenia than suffocation.

The œsophagus and lungs only were examined thirty-six hours after death. The larynx and trachea were slightly inflamed. The œsophagus was found extremely diseased: cancerous degeneration commencing at a point opposite the cricoid cartilage, and extending downwards for at least two inches. The mass in the neck consisted of the cervical glands secondarily involved in the disease, although not broken down, as were the œsophageal structures. The right common carotid, for the first inch of its course, and the corresponding portion of the subclavian artery, were firmly adherent to the cancerous mass, and exhibited great inflammation both of their sheaths and tunics. The pneumogastric and sympathetic nerves were entirely incorporated with the tumour at this point, and could not be further traced. Three nodules, each about the size of a small split-pea, were found in the lungs; and these, together with the tumour, were examined microscopically by Dr. Jenner, who found the disease to be of the encephaloid variety.

II. SEPARATION OF PUBIC AND SACRO-ILIAC ARTICULATIONS.

G. B., aged 44, a labourer on the London and North Western Railway, was knocked down by a train at the Harrow Station, on June 17th. The buffer of the engine struck him in the middle of the back, and threw him to the side of the line. He reached University College about 4 P.M., two hours after the accident. The pelvic bones were widely separated at the symphysis, and the right thigh had sustained a compound fracture in its upper third. There was no laceration of the urethra; the pulse was 120, and very feeble; and after recovery from the collapse, traumatic delirium continued.

He passed urine freely at 8 P.M., although previously the catheter could not be introduced. The pulse had then improved, and was only 85 per minute.

He was very restless during the night, and the pulse again rose, and was occasionally intermittent. The evacuations were passed involuntarily. Both pupils were dilated. He grew rapidly worse, and sank in the forenoon of the 18th.

At the *post mortem* examination twenty-four hours later, the pubic bones were found separated to the extent of four inches, and on the right side was a complete separation at the sacro-iliac synchondrosis. There was also a fracture of the right transverse process of the last lumbar vertebra.

Original Communications.

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

By H. HANNOTTE VERNON, M.D., Physician to the Blenheim Dispensary; formerly Resident-Accoucheur to St. Mary's Hospital.

PART I.—PHYSIOLOGY.

A MORE perfect control over the motor functions of the uterus has appeared to me for some time past to be one of the leading necessities of obstetric medicine. This fact is undeniable; viz., that, in ninety-nine cases out of a hundred, the first and last clinical resource of the accoucheur is ergot of rye. And yet, as a matter of theoretical discourse, the great majority of those well versed in the practice of obstetrics, will refer now to one variety of inertia of the uterus, and now to another; and will, at the same time, admit the utility of various agents over and above the everlasting ergot. The true explanation of this curious anomaly has its origin possibly in the following circumstances:

1. In the want of a complete physiological analysis of labour.
2. In the want of any scientific analysis at all of the complicated pathological conditions which are grouped together under the idea of *inertia uteri*.
3. In the defect of an application of such physiological analysis as exists to the limited pathological teaching on this head; and the want of harmony between these two and a code of therapeutics; and
4. In a deficiency of research of late years in the direction of oxytocics.

Without pretending to do more than advance a very short way towards a more advantageous position for the practitioner of obstetricy, I would submit that the following remarks contain something additional to our present stock of ideas in three several directions; viz.

First. In a more complete analysis of the motor actions of the uterus than exists in any text-book extant.

Secondly. In an attempt to reduce the multitudinous varieties of *inertia uteri* into something like scientific order; and in an endeavour to expound the pathological states which underlie them.

Thirdly. In the addition to our obstetric armamentarium of at least two valuable oxytocics, and in an attempt to draw the connection which really exists between physiology, pathology, and therapeutics, somewhat closer as regards an important branch of the medical art.

A dry and laborious physiological inquiry into the nature of the motor endowments of the uterus is so uninviting, except as a key to aberrant forms of uterine action and their appropriate remedies, that I will endeavour to compress this portion of the subject into as small a space as possible. It is, however, absolutely necessary to follow the physiological analysis closely, because it will be made use of in the sequel. And, as general incitement to such a disquisition, it may be observed that it will be hardly possible to retain a firm grasp of so complex a subject without reducing our ideas to the categorical form given by a scientific arrangement.

The elements of uterine nervi-motor action are

I. An arrangement of nervous fibres whose peripheral extremities are endowed with sensibility or irritability.

II. An arrangement of nervous fibres capable of conveying, to certain nervous centres, the excitor stimuli applied to their extremities.

III. Various nervous centres; either endowed with a power of *originating motor impulses*, or of *reflecting* impressions conveyed to them *in the form of motor impulses*.

IV. An arrangement of nervous fibres, capable of transmitting the motor impulses, generated in the nervous centres, to an organ endowed with power of motion.

V. A muscular apparatus, responding to various impulses, either generated in or reflected from various nervous centres; itself possessed, like all other muscular tissues, of an *irritability* of its own, and of a given *tonicity* and *cohesion*.

I. In speaking of an arrangement of nervous fibres, whose peripheral extremities are endowed with sensibility or irritability, as one of the elements of uterine nervi-motor action, and as an element distinct from the conducting apparatus, although these peripheral parts are only the extremities of the fibres which constitute the conducting apparatus, some explanation is necessary. The reason why what at first sight may appear a trivial distinction is made, is this: that there are morbid states, either of the tissues in which the terminations of the incident fibres lie, or even of the terminations of the fibres themselves, which are quite separate and distinct from any morbid condition of the nerve fibres themselves. Thus, there may be an inflammatory condition of some portions of the uterine tissue, or of the membranes lining the uterus, or of the placenta; and then there is excessive irritability of the extremities of the incident nerve fibres, either of some of them or of all. In cases where the uterus is affected with a low grade of inflammation, whether circumscribed or not, irregular, painful, spasmodic, and almost incessant contraction of the uterus frequently occurs. Women who become pregnant while labouring under imperfectly resolved inflammations of the cervix uteri, whether attended by abrasion or ulceration or not, are generally the subjects of acute suffering during parturition. Such suffering depends upon excentric hyperæsthesia, and is quite distinct from exalted sensibility produced by irritations applied to the trunks of nerves, and still more widely different from that centric hyperæsthesia which depends upon morbid or too mobile conditions of the cerebro-spinal axis, or ganglionic centres. Again; it sometimes happens that the irritability of the peripheral terminations of the incident nerve fibres is *diminished;* and this is most conspicuous in cases where a dead fœtus is retained in utero, up to or even beyond the natural term of gestation.*

II. In like manner the second element of uterine nervi-motor action is a certain arrangement of conductors, or incident nerve fibres pertaining also to two different systems—the cerebro-spinal and the sympathetic. If exception is made of the mechanical influence of tumours, there appear to be very few causes which can interfere with the due performance of the functions of the excitor or incident nerves. At any rate, if any such causes exist they would seem to consist of molecular conditions, beyond our present means of investigation. Or it may be assumed, without any great violence being done to reason, that the nerves themselves, both excitor and motor, may partake of the general hyperæsthesia which affects certain subjects; or they may have a special exalted irritability of their own, by virtue of which impressions made upon or produced at their terminations and origins are multiplied or exalted. But for all practical purposes it may be pretty safely assumed, in the vast majority of cases, that the functions of the excitor and motor nerves, as mere conductors of impressions and impulses, are entire.

III. The third element of uterine nervi-motor action is a certain arrangement of nervous centres endowed with the property of *originating* motor impulses, or with a power of *reflecting* impressions *in the form of motor impulses* also. These nervous centres may be arranged under six heads.

1. The minute ganglia described by Dr. Robert Lee as spread with their branches like a web over the surface of the uterus. Whether such ganglia have any real existence, has, until lately, been matter of dispute; but all physiologists of repute are now agreed as to the correctness of Dr. Lee's observations. These ganglia belong to the sympathetic system, and are the analogues of the ganglia described by Remak as existing on the surface of the heart in connection with branches of the cardiac plexus of nerves.
2. The ganglia of the hypogastric plexus; and, by communication, the whole sympathetic system.
3. The spinal cord.
4. The great ganglia of the brain proper.
5. The hemispheres of the brain.
6. The cerebellum.

It will be endeavoured to indicate how each of these centres act in originating, conducting, or reflecting motor impulses, presently. In the mean time it must be premised that, in order to have a normal action of the uterus, these different nervous centres must have a certain degree of polarity or excitability. If their polarity is defective, there will be irregular contraction of the uterus, or inertia uteri; if it is excessive, there will be either irregular, or clonic, or excessive contraction of the uterus.

IV. The fourth element of uterine nervi-motor action is an arrangement of motor fibres, or conductors of motor impulses, issuing from nervous centres of two kinds; viz., either sym-

* The peripheral arrangements of nerve pertain to either the cerebro-spinal or sympathetic systems.

pathetic or cerebro-spinal. The observations made as to the general integrity of the functions of the impression conducting nerves, apply also to those which conduct motor impulses.

V. The fifth element is a muscular organ containing the body to be expelled, acting "sponte sua," or consensually, or in a reflex manner; and various other muscles acting either in a reflex manner or consensually, or by direct volition. And the containing organ or uterus must be of a given quality as regards its muscular structure; that is to say, it must be of a certain tonicity and firmness, and capable of responding to the stimuli conveyed to it by the nerves. Thus particular forms of debility (anæmia, albuminuria) are attended by feeble action of the uterus, in consequence of deterioration of its muscular structure; and women who have borne many children, especially if breeding be prolonged beyond the usual period of life, have generally flabby uteri.

Having analysed the parturient apparatus, and resolved it into its elementary parts, it will be desirable now to show in what manner these different elements act, either separately or in combination. It has been thought sufficient hitherto to reduce the nervous phenomena under two categories: 1st. Centric, or direct, action; and, 2ndly, Eccentric, or reflex, action. But this method of dealing with the subject, although perfectly correct, is hardly analytical enough. It makes each category contain such a multiplicity of different actions, that the mind does not readily appreciate nor easily recollect them. It is preferable rather to take each nervous centre by itself, and to inquire into its mode of action in originating motor impulses, and in conducting them; and into the way in which it reflects, transfers, or diffuses impressions conducted to it by the excitor nerves. I spoke of six different nervous centres or systems of centres concerned in the act of parturition; and I shall now refer to them more in detail, but still as briefly as possible.

1. The ganglia which are described by Dr. Lee as covering the uterus immediately underneath its peritoneal investment, seem to me to be worthy of separate consideration from the ganglia of the hypogastric plexus, and the sympathetic system of nerves generally. In the first place, they are transitory structures developed at a particular period, and for a special purpose, and destined to disappear when that period has passed away, and that purpose has been fulfilled.* It is almost unnecessary to adduce *à priori* arguments to fortify Dr. Robert Lee's dissections; but if it were so, it might be asked why should the nervous elements of the uterine tissue be the only ones not undergoing evolution during pregnancy. From nuclei and spindle-shaped nucleated cells the muscular structure of the uterus is evolved; within the few short months which suffice for this enormous histological change, small twigs of artery are metamorphosed into trunks of considerable calibre, inconspicuous veins become huge reservoirs of blood, and the mucous membrane is converted into an organ of no small complexity. The second reason why I wish to fix attention more particularly on those sympathetic ganglia which lie in and upon the textures of the uterus, is the parallelism which obtains between them and the ganglia in and upon the heart, and the parallelism which obtains between some of the nervi-motor functions of the heart and uterus.

The experiments of Dr. Lee, Remak, Volkmann, and others, seem to have pretty clearly established that the ganglia contained in the substance of the heart are the nervous centres which originate and co-ordinate the motor impulses exciting it to contraction. It is unnecessary to go into the details of these experiments, further than to assist in showing that there are grounds for assigning to the uterine ganglia an analogous relation to the motor actions of the uterus. Thus—

a. The anatomical arrangement of the cardiac and uterine ganglia is very similar.

b. The heart and the uterus both act rhythmically, though in different degrees.

c. The contractions of the uterus, like those of the heart, travel over the organ in a definite manner, that part ceasing to contract first which first contracted.

d. The contractions of the uterus, like those of the heart, follow the application of a stimulus (applied directly to the organ) less rapidly than in the case of muscles supplied with nerves from the cerebro-spinal axis.

e. The heart and the uterus are not under the direct influence of the will; but they act consensually with other muscles which are under the control of the will: and this is true of all muscles supplied by the sympathetic.

f. The contractions of the heart and uterus are not necessarily suspended by the destruction of that portion of the cerebro-spinal axis from which they derive cerebro-spinal nerve-fibres; and

g. The same is true if the nervous communication is cut off, the centre being left intact.

h. Neither is abortion a necessary consequence of destruction of that portion of the spinal column which is in directest relation to the uterus.

i. Parturition can be excited in cases of paraplegia.

j. The uterus, in pregnant animals, will contract rhythmically hours after death.

k. The development of the rhythmical action of the uterus is cotemporaneous with the development of the ganglia spoken of. Although the uterus is capable of a certain amount of contraction in the non-pregnant state, such contraction is not rhythmical in its character, and, so far as is known, travels over the organ in no definite manner.

These arguments are not arranged in a very logical manner, but they will suffice to give a strong probability to the position claimed for the ganglia of the uterus. Hitherto the importance of these nervous centres (which might be called the brain of the uterus, in the same way as the solar plexus has been aptly called the brain of the stomach) has been very much overlooked. That prominence has not been given to those ganglia which are actually situated in and upon the textures of the uterus, and which are the product of the genetic evolution, which I think they possess. The irritability of muscular fibre in the human subject, apart from nervous connexions, is very small. It is true that portions of muscular fibre, separated from nerve and carefully cleaned, will contract upon the application of cold; but this contractility is an endowment common to other tissues, such as the yellow elastic, etc.; and hardly deserves to be called irritability. Again, the well known experiment of Valentin (who stimulated a muscle to contract by galvanic shocks conveyed through its nerves until it ceased to respond to the stimulus, and then produced fresh contractions by applying the stimulus directly to the muscle) is not worth very much; it only proves that, on the direct application of a powerful stimulus, a muscle will contract. It does not show that muscular fibre in the living subject habitually contracts, upon the application of a stimulus, by virtue of its own irritability. Physiological stimuli of sufficient intensity to provoke such action do not, in fact, exist; and, indeed, we have little or no knowledge of muscular action in the human subject, apart from nervous action also.

The following modes of action of the uterine ganglia are submitted:—

a. They act directly or centrically, originating a large share of the motor impulses which incite the uterus to contract; and more especially they preside over and determine the rhythmical nature of such contractions.

b. They reflect impressions conveyed to them, in the form of motor impulses.

c. They conduct impressions conveyed to them to the sympathetic ganglia generally; and

d. Such impressions are also conducted as far as the spinal cord, whence they are reflected, in the form of motor impulses, through the afferent spinal nerves; and the more intense the impression is, the greater will be the range of ganglionic centres to which it is conducted, and the more extensive will be the tract of spinal cord excited.

e. Or impulses originating in the encephalon, emotional, not connected with the will, are conducted through the spinal cord, and reach these ganglia; or such impulses may travel, as it were, by another route, viz., through the sympathetic, beginning in the cervical region, or through the splanchnic nerves.

f. Or centric action of the spinal cord may possibly evolve motor impulses, which are conducted to the uterine ganglia.

2. The ganglia of the hypogastric plexus, and the sympathetic generally, do not appear to bear such an important relation to the process of labour as the ganglia of the uterus proper. The communication is not very abundant, and the hypogastric plexus itself is not very large; and, moreover, it is only its inferior portion which is in direct communication with the uterus. But the functions performed are exactly similar in kind, only differing in degree.

a. They originate or act centrically.

b. They conduct *to* other centres.

c. They conduct *from* other centres.

* It is, of course, not meant that these ganglia are evolved *de novo* during pregnancy; but that from dormant and extremely minute elements they rise into structures of first-rate importance in the uterine economy. In like manner it is not meant that they absolutely disappear after delivery, but that they undergo the same process of involution which the other tissues of the uterus affect.

d. They reflect impressions in the form of motor impulses.

3. The exact share which the spinal cord takes in the nervi-motor functions of the uterus, it is not possible, nor indeed necessary, to determine. Whether it or the ganglia proper of the uterus exercise the preponderating influence, *i. e.*, originate or reflect the greater share of motor impulses conveyed to the uterus, does not concern us very much. What we are interested in knowing is the manner of action of the centres in question.

The following modes of action of the spinal column are submitted.

a. It acts centrically, originating motor impulses which are conveyed to the uterus either by its own afferent nerves, or through the ganglia of the sympathetic.

b. It reflects impressions made upon the excitor nerves, in the form of motor impulses; and this, whether the impressions are made upon the excitor nerves of the uterus itself, or of some other organ or part of the body. The sudden application of heat or cold to the general surface of the body is productive of reflex contraction of the uterus; but such reflex actions are more easily set up by irritating the mammary nerves, or the nerves of organs lying in the vicinity of the uterus.

c. The spinal cord conducts motor impulses generated in the great ganglia of the brain, themselves the product of emotion, to the uterus; or conveys to the uterus, from the same sources, influences which suspend its contraction.

d. The spinal column conducts to the voluntary muscles those motor impulses which are the product of the will, and which we believe to be generated in the cerebral hemispheres (speaking in a strictly physiological sense); or possibly it transforms the cerebral act into motor impulses. And the uterus acts consensually with the voluntary muscles so set in action, in the same way as the heart acts consensually with voluntary muscles, or the iris with some of the muscles of the orbit, or the bladder with the diaphragm and abdominal muscles, or the muscles of the intestine with the same muscles, or indeed with the voluntary system of muscles generally.

e. The spinal column receives those influences of co-ordination of voluntary movements which we believe to be generated in the cerebellum.

4. The great ganglia at the base of the brain were spoken of as the fourth system of nervous centres concerned in the parturient act. They must be considered as generating motor impulses, subsequently to the act of *perception* performed by the hemispheres of the brain; or the act of perception by the hemispheres (I speak in a strictly physiological sense again) is followed by the issuing of influences from the great ganglia which exalt, depress, or suspend the contractions of the uterus.

5. The cerebral hemispheres would appear to be the percipients of impressions which are transformed into motor impulses in the great ganglia, and conducted from thence through the crura cerebri and the spinal column to the uterus; or by another route, viz., through the par vagum and the sympathetic. And, again, it would appear that the cerebral hemispheres are the instruments of the will, and, by the intervention of the spinal cord, set in motion those muscles with which the uterus acts consensually. It will be seen that the brain acts entirely in a centric manner. I have not referred to the medulla oblongata, nor to the sensory cerebral nerves, because the latter really belong to the medulla; and the medulla itself acts in a manner no way different from the spinal column as regards the act of labour.

6. The cerebellum acts only as a co-ordinator of those voluntary muscles with which the uterus acts consensually. As far as is known, its action is purely centric.

In some particulars, the account just given of the nervi-motor actions of the uterus is different from any other with which I am acquainted. In most obstetric systems of the present day, there is a casual reference to the reflex nature of uterine contraction, as well as to the influence of the emotions on the uterus during labour. In Dr. Tyler Smith's recent course of lectures, the subject is more fully investigated than in any prior writings; but, admirable as his account is, an undue share of importance is (I would submit, with the greatest deference to such an authority) accorded to the spinal column, which is, in my opinion, only an accessory to the act of labour, though chief accessory.

Intimately connected with the foregoing physiological particulars are some points in the pathology of uterine nervi-motor action.

14, Harewood Square.

SUCCESSFUL SYSTEM OF DRAINAGE AT WORTHING.

By HENRY COLLET, M.D.

[*Abridgement of a paper read before the South Eastern Branch, June 24th*, 1857.]

As a branch of hygienic or preventive medicine, the subject of this paper cannot fail to interest general practitioners. The narrative may also prove an encouragement to other towns similarly situated to follow an example effecting so much good in the prevention of disease, in the increase in value of life and property, in domestic happiness, especially among the poorer classes, and, it may be hoped, an improvement in the moral and religious tone of society.

There are some now living in Worthing who remember it a small fishing village. It became a popular place of resort, and consequently increasing and prosperous, from the advantages of its position on the coast, its wide spread sands, and the varied beauty of the surrounding neighbourhood. As the population increased, however, the drainage, which was from the beginning without arrangement, and based upon the old polluting system of cesspools, proved defective. These poured their fluid contents by several trunks on the shore, a short distance from the beautiful esplanade, which at times, therefrom, especially during the ebb of the tide, could no longer be resorted to.

Who, then, can be surprised that the town became injured in reputation as a watering place? But this was not all. The wells in many places became contaminated by soakage from the cesspools with which they were in close proximity, so that the water became thereby unfit for use. The requirements to remove these evils were a new system of drainage carried *from* the shore, and a general and sufficient supply of pure water. How it has been supplied, the following description of the works will show.

Drainage. The cesspools in the town (and there was one to almost every house) have been filled up, and water-closets have been substituted. The pernicious system of discharging the sewerage into the sea, in front of the town, has been abandoned. The drainage has been wholly remodelled; a main brick sewer or culvert, of an egg shape, measuring 3 feet 2 inches by 2 feet 3 inches, has been carried through the principal streets, at a depth, in some parts, of 23 feet; and is connected with the other streets, and with every house by branch drains of stone ware, varying in diameter from 15 inches to 6 inches. The main sewer terminates in a sumpt 6 feet 2 inches by 2 feet 10 inches; and a sewerage-well 30 feet deep and 10 feet in diameter at the top, reduced to 6 feet at the bottom. This well is situated considerably to the north-east of the town, and an artificial fall is obtained into it from every direction. In it is placed a sewerage-pump, consisting of three fifteen-inch barrels, worked by steam power, and connected with the engine in the water tower (shortly to be mentioned) by an iron shafting and driving gear, by which it is pumped through an outfall sewer emptying itself into the sea, at a place two miles eastward of the town, called Sea-Mills Bridge. There the sewerage mixes with a stream of pure water from the hills, and with the general drainage of the district. It is worthy of remark, that the abundant supply of pure water, mixed as it now is with the sewerage, so completely, by its antiseptic properties, counteracts the putrefactive fermentation, that neither at the works, nor in the immediate neighbourhood of the outfall, is there any disagreeable smell. Thus the beach and sands are wholly freed from the sewerage which formerly damaged both them and the esplanade; the sands are rapidly improving, and will, it is expected, before long, recover their former firm and dry condition.

Water Supply. The water tower at the north-east of the town, with the engine-house and chimney shaft adjoining, have been erected under the direction of W. Rawlinson, C.E. It has a total elevation of about 110 feet, and measures 40 feet square on the plan. There is a central pier of brick, and a spiral staircase of cast iron. The foundation is of concrete. Within the adjoining engine-house, a well has been sunk in the chalk, to a depth of 70 feet, which is lined with iron cylinders, to exclude the surface water. Below this depth, a bore has been driven into the chalk 295 feet further, making a total depth of 365 feet; from it gushes an abundant supply of the purest water, 15 degrees of hardness, which is lifted by the engine into a water-tank at the top of the Tower, and thence distributed into all the houses in the town. The tank is of cast iron, 40 feet square, and 13 feet deep, and will contain 110,000 gallons. Its bottom is 70

feet from the ground. The thickest plates are half an inch, and the thinnest three-eighths of an inch, in substance. The engine—which, as I have mentioned, also works the sewerage-pump in the sewerage-well, situated at a little distance—is a high pressure one, and was made by Messrs. Headley and Manning, of Cambridge. The engine commenced work at the end of last year (1856). The public sewers are all completed. The whole of that part of the town in which visitors reside is effectively drained and supplied with water, and the remaining works in the smaller streets are rapidly approaching completion. The poorest cottager has now, or shortly will have, with respect to water-supply, all the advantages of his richer neighbours.

It is well known to visitors who have frequented the town, that a quantity of sea-weed is apt to be thrown upon the beach in the autumn. Except in combination with other substances which create chemical decomposition, it cannot be considered unhealthy, but remedial. The late Dr. Golding Bird was wont to remark that, but for the sewerage mixing with the sea-weed thrown on the shore, it would be an additional inducement to send patients to Worthing. The whole drainage having been removed, no deleterious action can again occur from this source.

With all the adverse circumstances which have been mentioned, the Registrar's report has not shown any unusual mortality in Worthing. The annual number of deaths has averaged from 15 to 17 per 1000 on the population for seven years, including many visitors. Of 417 deaths in the last three years, 39 only resulted from epidemic diseases. Cholera is wholly unknown. The daily range of the thermometer in three successive years, reported by the Registrar-General, from observations taken by Mr. W. G. Barker, of Worthing, was coequal with that for Ventnor, Torquay, Guernsey, Liverpool, etc.—*the least* in the kingdom. It was thus proved—1. That the town of Worthing, in all its natural relations, cannot be considered otherwise than a healthy locality, and a desirable place of resort for invalids. 2. That the objections hitherto existing arose entirely from its defective drainage, and are now completely removed by the new system just described.

I hope that, as the town has seriously suffered by the previous condemnation of my medical friends, they will now, as an act of justice to the inhabitants, and for the benefit of society, make known its present altered and improved condition.

FRACTURE OF THE CRANIUM.

By Henry Hancox, M.D., Wolverhampton.

John Smith, aged 35 years, a strong, well built man, by occupation a miner, when returning home from market, rather the worse for liquor, was attacked by a man, who threw a brick at him, which struck him on the left side of the head, a little above the orbital ridge of the frontal bone, producing a wound about two inches in length, with fracture of the bone. He fell and remained insensible for a few minutes, when he rose and walked home, a distance of about two hundred yards. An unqualified man attended him, and dressed the wound, and continued to visit him for three weeks, the patient, during the whole of this time, being semiconscious. The fracture was not detected by the worthy attendant, who applied six blisters to the legs and other parts of the body. Occasional delirium on the part of the patient induced the quack to believe the man "mad," and to recommend his removal to the asylum. The friends, not willing to comply with the wishes of the attendant, summoned my brother, Mr. W. M. Hancox, to attend him. He found the patient in a semi-conscious state. The man answered questions when loudly spoken to; the pupils acted freely; he referred all his sufferings to the head, pointing to the injured part as the seat of pain. On examining the head, a fracture was distinctly detected, with depression of a fragment; on pressure being applied, the patient was thrown into convulsions, which led to the belief that a portion of bone was pressing on the brain. The operation of trephining was performed by my brother, in the usual way, in the presence of Mr. Cooper and myself, when a small spiculum of bone, about an inch in length, was found penetrating through the dura mater into the substance of the brain; it was removed, the wound was brought together by plaster, and water dressing was applied to the parts.

The following day the patient was quite conscious, was able to speak and recognise those around him, and expressed himself thankful for the relief he had obtained. He continued to improve daily, and at the end of a month was able to go about, and gave evidence before the magistrates against the man who committed the assault.

From the above time he began to drink, and was attacked with inflammation of the brain, for which he was bled, and calomel, etc., was administered. He lingered for ten days, and died.

A *post mortem* examination was made forty-eight hours after death. The dura mater was quite healthy; on cutting through that membrane, lymph, in quantity about five or six ounces, was found to be pressing upon the brain, the left hemisphere of which was in a state of suppuration; the right hemisphere and cerebellum were slightly congested.

Remarks. This case presents a few points of interest. The circumstance of the man walking home after receiving so severe an injury, and shortly after reaching home becoming partially comatose, and remaining in that state for three weeks; the complete success of the operation so long after the injury; and the restoration of consciousness to enable him to be questioned and cross-questioned by the magistrates, show the necessity of having recourse to every means in our power likely to prolong life or arrest disease. It may be stated, without fear of contradiction, that had it not been for his own imprudence in having recourse to stimulating drinks, his system at the time doubtless being debilitated and not sufficiently able to withstand the stimulating effects of alcoholic liquors, he might have been now living.

I am induced to send the above particulars on reading a similar case reported in the Journal of last week, by Dr. Clarke, of the Worcester Infirmary.

British Medical Journal.

SATURDAY, JULY 11th, 1857.

DEATH OF

JOSEPH WICKENDEN, Esq.,

We regret to have to announce this day the death of Joseph Wickenden, Esq., of Birmingham, one of the founders of the Association, and to the last one of its most active members of Council. The death of this estimable man took place suddenly, from apoplexy, on Sunday last, at his residence in the vicinity of Birmingham. A biographical sketch of Mr. Wickenden will be found in a succeeding column.

THE TRIAL FOR POISONING AT GLASGOW.

The electric telegraph has this afternoon (Thursday) brought tidings that the jury, empanelled to try whether or not Madeline Smith treacherously and foully murdered her lover, Emile L'Angelier, have returned a verdict of "Not proven". Now that this interesting trial is concluded, we shall give in our next number a summary of the case in its medical bearings.

In the meantime, there are some remarks of practical interest, which may be offered at once. When Mr. Kesteven in this Journal undertook to supply the antidote to the "poisoning information," afforded to the public, with no evil intent of course, but still with evil effect, by *Chambers's Journal* and

Blackwood's Magazine, that it was a common practice of the Styrian peasantry to eat arsenic in order to improve their wind and complexions, he little thought that before a couple of years were passed this practice would be referred to as an excuse for the possession of this deadly drug by a young lady, and that the opinions of two medical men, of a diametrically opposite nature, would be given in an open court of law as to the effect of an arsenical solution on the human skin. The public must, we fear, be sadly puzzled to find that two scientific men cannot agree as to the effect of one of the best understood poisons upon the epidermis —to hear Dr. Laurie state that he has washed his hands in a solution of arsenic without unpleasant results, and to hear a professor of chemistry, Mr. Penny, give it as his opinion that "the external use of arsenic is very dangerous"! It will strike plain men that these questions ought to have been long since decided—that, when prisoners at the bar are trembling between life and death, science should not be found guessing upon matters which may send them to the scaffold.

The histories of all the famous poisoning cases tried of late years are sufficient to prove, that medical men have not noted with sufficient accuracy the effect of arsenic and other poisons upon the human body, either inwardly or outwardly. In the trial of Wooler for poisoning his wife, the nature of the case was not suspected for many weeks by the highly respected physician who attended her; indeed, he thought she was "consumptive and had ulceration of the bowels". In like manner, whilst Mrs. Palmer was sinking under the effect of repeated doses of tartarised antimony, Dr. Knight, her physician, thought, "as far as he could judge, that she was suffering from a severe form of cholera—English cholera." L'Angelier is the last victim of poison, whose case has become notorious. Eighty-eight grains of arsenic were found in his stomach, and, in all probability, double that quantity had been originally taken; nevertheless his medical attendant, Dr. Hugh Thomson, "took his complaint to be a bilious derangement," and he acknowledges that he "never suspected irritant poison."

Thus, in three celebrated cases, the poison was left to do its work unnoticed, until too late, by the professional men in attendance. Let it not for one moment be supposed that we wish to impute blame to either of these gentlemen for the non-discovery of the truth in time to save life. That the symptoms of poisoning by antimony and arsenic do simulate the effects of choleraic poison in the body, there can be little doubt; that arsenic may cause symptoms similar to those witnessed in a bilious attack, may also be granted; that medical men in the present state of our knowledge should mistake the effects of these poisons for those of natural disease, is not for one moment to be wondered at, or mentioned to their prejudice; but the fact still remains, that they do mistake them, and that murder may be perpetrated with impunity. It will be urged, we know, that, in the cases we have mentioned, the instrument of death was discovered by medical science; but, we may ask, in how many poisoning cases have the victims of jealousy and all other evil passions slept their last sleep, whilst the register of death, in place of noting "the deep damnation of their taking off", speaks only of ordinary disease? We cannot think of the many evil deeds that may be buried in the silent grave, without a shudder; and we ask our professional brethren whether it is not time that the effects of different poisons upon the human body should be much more accurately noted than they have been hitherto? We know that but too often the fearful truth of the presence of arsenic in the body of the prostrate patient is not diagnosed until it is too late to remedy the evil; we know that retrospective knowledge is liable to be tinctured with error; still, the knowledge that we alone have the opportunity of taking up, in the majority of cases, the first clue of many a hideous maze of crime, should make us careful so to prepare ourselves that we may not be found wanting at the critical moment. We know full well how difficult a part the medical man has to take in any case where foul play is suspected. One false step may bring upon him ruin; and, in any case, the discovery of the truth cannot but be painful and full of trouble to him. Nevertheless, we must accept the consequences of our mission, whatever they may be; and we should so prepare ourselves as to be ready at any moment to answer, without fear, the question that may suggest itself—"Am I only playing the part of a blind, whilst crime is leading my patient the dusky road to death?"

THE WEEK.

In the list of pensions granted during the year ending June 20th, 1857, and charged upon the civil list, we find the following names:—

Dr. William Pulteney ALISON, £100, November 10th, 1856 (late Professor of the Practice of Physic in the University of Edinburgh), in consideration of his scientific attainments.

Mrs. Margaret GAVIN, £50, November 15th, 1856, in consideration of the distressed circumstances in which she has been left on the death of her husband, Dr. Hector Gavin, who was accidentally killed in the Crimea, while employed in the public service.

Mrs. Lydia Falconer MILLER, £70, June 19th, 1857, in consideration of the eminent services rendered to literature and science by the works of her late husband, Mr. Hugh Miller, and the straitened circumstances in which she is placed by his decease.

THE LATE JOSEPH WICKENDEN, ESQ.

IT has often been remarked as one of the characteristics of Birmingham society, that however much it may be wanting in that intellectual element which predominates in communities less exclusively devoted to business, it has been signally favoured in being chosen as the residence of some of the most eminent members of the profession. One of those men who have a reputation beyond the immediate circle of their practice has just passed from us. Mr. Wickenden, who has occupied a leading position in Birmingham for the last quarter of a century, has died. On the evening of Saturday, he retired to bed in his usual health, and was soon after suddenly attacked with a fit of apoplexy, which terminated his useful life on Sunday morning, July 5th.

Mr. Wickenden was born on the borders of the New Forest, in 1795. His early life was distinguished by industry and activity; and, having at a somewhat early age decided upon entering the medical profession, he was articled to Messrs. Dansey, Muston, and Basket, surgeons, of Blandford. Mr. Wickenden pursued his studies in London at Guy's and St. Thomas's Hospitals, and on their completion he settled in Birmingham, in 1818. He came here almost a total stranger; but his devo-

tion to his profession, his intelligence, and his kindness of manner, soon gathered around him a circle of friends, which continued to expand year by year until his death. His career was one of continuous industry, and his benevolence formed a portion of his daily duties rather than an occasional display of that quality, in which the medical profession above all others abounds. Mr. Wickenden was one of the few surviving representatives of the Medical Society of that day, which numbered so many eminent men in its ranks, and he was associated with them in the formation of the Medical Benevolent Society, in which he ever manifested a deep interest, and the objects of of which harmonised so entirely with his disposition. He was one of its early directors, and considered it his bounden duty to attend its quarterly meetings, and dispense the benefits of the institution with a wise discretion.

Soon after settling in Birmingham, Mr. Wickenden became connected with the Philosophical Institution, and was its secretary for about eighteen years. He read one or two papers to the society, and took a deep interest in its progress. His devotion to general science was the only relaxation from the labours of his profession he allowed himself to indulge in. He was a Fellow of the Geological Society, and attended the meetings of the British Association, whenever he found it practicable to do so. His connection with the Philosophical Institution afforded him an opportunity of cultivating the friendship of many eminent men. At the final closing of the Institution he transferred his share in the property to the Midland Institute, and was a frequent and attentive attendant upon many of the scientific lectures delivered in connection with the new society.

In 1826 Mr. Wickenden was a candidate for the honorary appointment of surgeon to the Birmingham General Dispensary, but was disappointed in the object of his ambition, and never afterwards was a candidate for any public office.

In 1832, in conjunction with Sir Charles, then Dr. Hastings, and others, he assisted in the formation of the Provincial Medical and Surgical Association. Mr. Wickenden was for many years a member of the General Council; and was elected, under the revised laws, as one of the representatives of the Birmingham and Midland Counties Branch, and as a member of the Committee of Council, in the proceedings of which he took an active part. At the annual meeting of the Association, held in Birmingham last year, he was active in promoting its success.

He was a member of the local Medical Society, and held the office of president for the last eighteen months. The last meeting of the society was held at his house, on which occasion he embodied his long experience in the profession in a very useful paper, on the difficulties and responsibilities which attach themselves to the duties of a medical man.

As a medical practitioner his judgment was sound and practical, and was held in high estimation by his professional brethren, who were glad at all times to avail themselves of his counsel: and many of the younger members of the profession will ever remember the willingness and kindness with which he rendered them assistance in the time of difficulty. In the midst of his arduous duties his health began to suffer; and about twelve years ago it was thought desirable for him to remove from the town to the Hagley Road, and limit his professional duties, which were making too great a demand on his health. By his numerous patients his loss will be severely felt, for they not only lose in him their skilful medical adviser, but also their genial friend and their kind and discreet counsellor. Always courteous, cheerful, and considerate, and influenced as he was by deep and earnest religious convictions, he brought comfort and consolation to many a troubled bed and to many a sorrowing household. He has his reward in the universal regret which the intelligence of his sudden, but happily painless, death has caused, and in the love and respect with which the recollection of his blameless and useful life will long be cherished.

[The above sketch is taken, with a few verbal alterations, from the *Birmingham Journal*.]

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July instant.

Philip H. Williams, *General Secretary*.

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Annual Meeting.]	37, Soho Square, London.	Tues., July 14, 3 P.M.
Shropshire. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Tuesday, July 14, 2 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary*.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary*.

Worcester, July 1857

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

SOUTH EASTERN BRANCH: ANNUAL MEETING.

THE Annual Meeting of the South Eastern Branch was held at the Town Hall, Reigate, on Wednesday, June 24th; Charles M. THOMPSON, Esq. (Westerham), President, in the Chair. There were also present: J. H. Baller, M.D. (Penshurst); G. Bottomley, Esq. (Croydon); J. C. Burrows, M.D. (Brighton); R. Bushell, Esq. (Horley); A. Carpenter, M.B. (Croydon); C. Wm. Chaldecott, Esq. (Dorking); H. Colebrook, M.D. (Southborough); H. Collet, M.D. (Worthing); G. N. Edwards, M.B. (London); W. A. Greenhill, M.D. (Hastings); H. Harris, Esq. (Reigate); G. F. Hodgson, Esq. (Brighton); C. Holman, M.D. (Reigate); H. M. Holman, M.D. (Hurstpierpoint); T. K. Hornidge, Esq. (London); T. Hunt, Esq. (London); Peter Martin, Esq. (Reigate); P. J. Martin, Esq. (Pulborough); George Moore, M.D. (Brighton); Lewis Newnham, M.D. (Camberwell); W. Newnham, Esq. (Tunbridge Wells); R. M. Rathill, Esq. (Westerham); E. Ray, Esq. (Dulwich); J. Reid, Esq. (Canterbury); W. Sankey. Esq. (Dover); A. Sisson, Esq. (Reigate); S. G. Sloman, Esq. (Farnham); T. Smith, Esq. (Crawley); T. H. Smith, Esq. (St. Mary Cray); J. Stedman, Esq. (Guildford); J. S. Steele, Esq. (Reigate); W. Street, Esq. (Reigate); C. R. Thompson, Esq. (Westerham); C. Trustram, Esq. (Tunbridge Wells); R. Turner, Esq. (Tunbridge Wells); W. Wallis, Esq. (Hartfield); T. B. Winter, Esq. (Brighton); also W. Batley, Esq. (Brighton); S. R. Crabtree, Esq. (Reigate); W. Harvey, Esq. (London); R. Martin, M.B. (London); W. Martin, Esq. (Bengal Medical Service); F. M. Smith, Esq. (London); W. Soper, Esq. (Reigate); and R. H. Stone, Esq. (Redhill.)

PRESIDENT'S ADDRESS.

I desire to thank you for the honour you have done me in placing me in this chair. I am fully sensible that my elevation to this position has been rather a matter of accident than from any merit on my part. If, indeed, I had any claim to this distinction, it could only arise from the fact of my being a very old member of this Branch of our Association. It is customary on these occasions for your president to address you, gentlemen, upon some scientific subject; but this you must not expect from me. When I look round and see many gentlemen so far my superiors both in position and in attainments, I should consider it the height of presumption on my part to address them upon scientific matters; and in truth, had I the ability to do so I should lack the inclination. The time of our meeting extends over so few hours, that I believe the majority of our members would rather look upon it in a social than a scientific point of view. Escaped from the trammels of business for a few hours, they are disposed to pass them in social intercourse, in making new friendships, and renewing old ones, and in seeing such objects of interest as our place of meeting may enable them to witness. You will remember that at our last anniversary at Chatham, the meeting was adjourned after the usual routine business had been disposed of, and that two or three hours were most agreeably spent in the museums and hospitals of the place. I am sorry to say we cannot offer you any such interesting object in this town. Had our meeting taken place at Redhill (and I may here mention that a want of accommodation alone prevented our holding it there), we should have proposed visiting the Asylum for Idiots on Earlswood Common, and also the Philanthropic Schools at Redhill, both of which are well worthy of attention, but are now, I fear, too far removed from us. We are now assembled at Reigate, and with your permission I shall give you a short topographical account of it, for which I am indebted to my friend, Mr. Peter Martin.

Reigate is an old town, with little or no history. It possessed a castle which, like those of Tunbridge and Guildford, opened its gates to Louis the Dauphin, or rather to the barons associated with Louis, to oppose King John. Of this castle some earthwork remains, and from the centre of the keep you may descend into a remarkable cave excavated to a considerable distance in the sand rock. This is no doubt a very ancient work. About the year 1780, Miss Burney, on one of her periodical visits to Brighton with Mrs. Thrale, stopped to refresh at Reigate, and described it in her diary as an "old decayed borough." Since that period it has passed from "decay" to a certain amount of prosperity, which has been mainly owing to its situation on the high road to Brighton, and latterly to the formation of the junction station at Redhill. The town of Reigate is situated on the lower green range of sand which extends from the western parts of Surrey to Hythe, in Kent. This sand range rarely exceeds a mile in width. It is bounded on the north by a narrow clay belt, beyond which rises the chalk, in a parallel range, to about five hundred feet above the sea. On the south of the central sand ridge begins the great clay district of the Wealden. The climate is mild and dry, but does not differ materially from that of other parts of the south of England. On the southern slope of the green sand, however, which is always steep and sometimes precipitous, there are many sheltered spots where the average temperature is two or three degrees above that of the south-eastern district. On the first publication of the Registrar-General's returns it appeared that the Union of Reigate enjoyed a high degree of salubrity as evinced by a low rate of mortality. It is curious, as being rather opposed to popular notions, that whereas this small rate of mortality is based on the register of the Reigate Union, a comparatively small portion of this union exhibits sandy strata. About one-third of the union consists of the weald clay district, and another third extends into the chalk range, cold and damp on the surface and sloping northwards. The sandy range of Reigate is no doubt much more agreeable to dwell on, but it does not appear that either the chalk downs of Chipstead and Walton, or the clay flats of Horley and Charlwood, add inordinately to the rate of mortality of the whole union. The supply of water in the town and its immediate neighbourhood is at present insufficient and uncertain, and this circumstance, besides its own inconvenience, brings with it that of incomplete and inefficient drainage. At the census of 1851 the population of the parish was 4,909; it must now be 6,000. You will perceive, gentlemen, there is nothing much attractive in this town; but should time permit, I should recommend a visit to the Castle grounds, and also the Cave, in which, it is said, the barons used to meet and discuss the provisions of Magna Charta.

But to us, gentlemen, this town has a peculiar claim upon our interests, as being (not the birthplace) but the residence for many years of one of the greatest friends and ornaments of this Branch of our Association, of a gentleman who has devoted a long life to the advocacy of medical reform, and the improvement of the status of our profession; who founded this Branch; who twenty-five years ago originated the idea of the Medical Benevolent College; and who, had he been supported by the public and the profession as he ought to have been, would have carried out that noble plan, and would have won those laurels which now grace the brow of a more fortunate and not less worthy man. You may perhaps recognise in this brief sketch our friend Thomas Martin, who through a long life has upheld the honour and dignity of our profession, and has left a bright example of what may be achieved by talent, integrity, and perseverence. Retired now from the arduous duties of his profession, he still devotes his energies to the welfare and improvement of his fellow-townsmen. Schools, institutes, churches have risen under his auspices; and in future years, when the inquirer asks after Thomas Martin, he will be told as of one of yore, *Si monumentum quæris, circumspice.*

And now, having spoken of a living ornament of our profession, permit me to say a few words of one who is no more. You must all regret with me the loss we have sustained since our last anniversary, in the death of Isaac Hargreaves. He was a talented surgeon and a perfect gentleman. Upon two occasions he filled the chair which I now unworthily occupy; and all well remember how admirably he discharged his duties. His liberality to his patients knew no bounds; indeed, he was liberal to a fault; for, permit me to say, I think a medical man may be too liberal. However indifferent to emolument himself, he should remember that by exercising liberality to those who do not need it, he places in an invidious position those of his medical brethren who cannot afford to exercise the same amount of liberality. I have argued the point with him, and am quite convinced that he acted from the purest, though I think, mistaken motives. But his liberality extended also to his professional brethren. He was always kind and courteous to his juniors, and I believe no one ever called him into consultation who had cause to regret having done so. Liberal during his life, he was so likewise in his death. I can say with truth he has made the widow's heart rejoice. He has bequeathed a handsome legacy to the dispensary at Tunbridge Wells, with which he was connected, and has made the munificent bequest of £500 to the Medical Benevolent College, to which he had been a handsome donor while living. Few of our profession have the power of acting as Isaac Hargreaves has done: let those who have the power follow his example. *Requiescat in pace!*

REPORT OF COUNCIL.

Mr. PETER MARTIN (Secretary), read the following report:—

"The Council, in meeting the Branch on the present occasion, have to congratulate their constituents on a continued state of welldoing. The number of members is somewhat on the increase, the losses by death and resignation since the last anniversary having been eight, and the number of new members twelve. At the same time, the Council feel that there is a large number of gentlemen practising in the three counties, whom they could gladly see associated with them in the British Medical Association. The isolated position so often occupied by a general practitioner in the country, leads him to be naturally self-dependent; but if he rightly considers his duty to his profession, he surely ought to join in association with others to devise and to carry out what improvements may be wanted for the common good; and if the hitherto unorganised condition of the medical profession has prevented this Association from as yet fully attaining the object at which it has aimed, we are fully persuaded that, in the incidents of these meetings, and in the pleasurable connexions and friendship which arise from them, sufficient inducement should exist to bring all practitioners in the district into union with us.

"The Committee feel sure that one of the first thoughts which will occur to the mind of every member here to day, will be the loss which we have sustained in the death of Mr. Hargreaves, and which has been already noticed by the President. The late Mr. Hargreaves was one of the first promoters of the establishment of this Branch, and continued to his death one of its warmest supporters. He twice filled the office of President to the great satisfaction of the members, and was seldom absent from our meetings, where his hearty greeting will long be missed.

"The Committee have not to report any application for a contribution from the fund to the sustenance of local meetings, according to Rule VIII of the Branch; but they consider the provisions of this rule so valuable, that it will not long remain without application.

"The Medical Reform question appears at length to have arrived at a point from which we may look forward to its resolution. The opinion of the profession, and we may say public opinion, so far as the very limited public is concerned, which either understands or cares for this question, appears to be generally in favour of Mr. Headlam's Bill, and it will be proposed to this meeting to present a petition in favour of the Bill.

"The agitation against the mal-administration of the Poor-Law in medical matters, which after some years abeyance has been re-commenced, must effectually lead to a successful result, because the struggle is based on principles of truth and common sense; these will have to combat a vast amount of ignorance and prejudice, and it must be confessed that their advancement is impeded by the conduct of many members of the profession. The generous conduct, however, of the younger members of the profession, the practitioners of ten years hence, will, we trust, much modify this latter condition. And to the internal behaviour of the profession, we must principally look for the change, which is to modify the conduct of the governing powers towards us.

"The Council have to report that they have received a requisition from the members residing at Brighton, inviting the Branch to meet at that town in 1858; and they have great pleasure in recommending the meeting to accept their invitation.

"The balance in the hands of the Treasurer at the last meeting was £21 : 14 : 4. The Branch subscriptions have amounted to £14 : 14. The expense of the year to £8 : 1 : 5. The balance in the hands of the Treasurer at present is £28 : 6 : 11."

On the motion of Mr. H. SMITH, seconded by Mr. G. STEDMAN, the report was unanimously adopted.

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following gentlemen were returned as members of the General Council:—G. Bottomley, Esq. (Croydon); W. A. Greenhill, M.D. (Hastings); J. Reid, Esq. (Canterbury); James Stedman, Esq. (Guildford); C. M. Thompson, Esq. (Westerham); E. Westall, Esq. (Croydon).

COUNCIL OF THE BRANCH.

The following gentlemen were elected the Council of the Branch:—J. C. Burrows, Esq. (Brighton); E. J. Furner, Esq. (Brighton); W. A. Greenhill, M.D. (Hastings); J. Reid, Esq. (Canterbury); F. H. Sankey, Esq. (Wingham); W. Sankey, Esq. (Dover); James Stedman, Esq. (Guildford); G. Stilwell, Esq. (Epsom); W. Street, Esq. (Reigate); C. Trustram, Esq. (Tunbridge Wells); E. Westall, Esq. (Croydon).

PLACE OF MEETING IN 1858: ELECTION OF OFFICERS.

It was proposed by C. TRUSTRAM, Esq., seconded by THOMAS H. SMITH, Esq., and resolved—

"That the place of meeting in 1858 be Brighton; and that John Cordy Burrows, Esq., be requested to act as President; Dr. Branfoot and Mr. Lowdell as Vice-Presidents; and that Dr. King, Dr. Dill, Mr. Dixon, Mr. Taaffe, Mr. Hodgson, be the Local Members of the Branch Council."

It was proposed by J. H. BALLER, Esq., seconded by C. TRUSTRAM, Esq., and resolved—

"That Peter Martin, Esq., be requested to act as Secretary and Treasurer for the ensuing year."

VOTE OF THANKS.

It was proposed by T. B. WINTER, Esq., seconded by WM. NEWNHAM, Esq., and resolved—

"That the best thanks of the South-Eastern Branch be offered to Adam Martin, M.D., President, to J. Dulvey, Esq., and F. J. Brown, M.D., Vice-Presidents, and to the Branch Council, for their kind attention to the business of the Branch during the past year."

MEDICAL REFORM.

It was proposed by C. TRUSTRAM, Esq., seconded by JAMES REID, Esq., and resolved—

"That a petition be presented by the South-Eastern Branch to the House of Commons, in favour of the Medical Reform Bill introduced by Mr. Headlam."

POOR-LAW MEDICAL REFORM.

EDWARD RAY, Esq., proposed, R. TURNER, Esq., seconded, and it was resolved—

"That this meeting warmly sympathises with the Poor-Law Medical Officers in their long continued struggle for more just treatment both to themselves and to the sick poor; and that the following petition be signed by the Chairman on behalf of the Branch, and presented to the House of Commons."

PARASITIC VEGETATION: THE SPHÆNIA ROBERTSII.
BY J. REID, ESQ.

Mr. REID (Canterbury) exhibited specimens of *Sphænia Robertsii*, a parasitic vegetation growing on caterpillars in New Zealand, and used in China as a medicinal article of diet.

SACCULATED URINARY CALCULUS. BY J. REID, ESQ.

Mr. REID also read a Case of Sacculated Urinary Calculus, which he had removed by the recto-vesical section, and in which the patient had recovered from the operation.

DRAINAGE OF WORTHING. BY H. COLLET, M.D.

[This paper is published in the present number of the JOURNAL.]

CALIPERS FOR MEASURING THE MOVEMENTS OF THE CHEST IN INSPIRATION. BY G. N. EDWARDS, M.B.

This instrument differs from the ordinary caliper compasses in having the two legs continued beyond the joint in two flat pieces of metal, which move parallel to each other, as the compass is opened or shut. One of these flat pieces is cut into the segment of a circle, whose centre is that of the compass-joint, its outer circular edge being grooved for the reception of a small catgut cord, working, as the instrument is opened or shut, on a small pinion wheel, whose axis is perpendicular to the flat piece of metal terminating the other leg, and turning a small index-needle parallel to the plate in which the index of the pinion works. By this arrangement, when the extremities of the feet of the calipers are kept applied to any two points whose distances from each other vary, this variation, and the proportionate one described by the circular arc, is indicated by the motion of the index-needle over the dial-plate. Such dimensions are chosen that a difference of two inches between the extremities of the feet of the calipers causes a complete revolution of the index-needle. Variations of less than the twentieth part of an inch are thus rendered apparent, and easily measured. For greater variations than two inches, a piece removed from the dial-plate, with an index in its upper part, exposes a graduated scale on the surface of the circular arc. A spring of vulcanised India-rubber, attached to each foot of the instrument, at equal distances from the compass-joint, assists in keeping the extremities of the feet in contact with the points whose variation in distance is to be measured. The lower half of each leg of the calipers slides into the other, for convenience of portability; and a small spring prevents the lower half of each leg from sliding back into the upper when the instrument

is in use. These calipers, as then constructed, were described and figured in the *Medical Times and Gazette* of Dec. 27th, 1856. They have, however, been considerably altered since that time.

PREVALENT TYPES OF DISEASE.

Mr. SMITH (St. Mary Cray) called attention to the frequency of carbuncle and boil, thecal abscess, and suppurations generally, as well as to the great frequency of intermittent complaints. He dated a diminution of diseases of sthenic character from the first cholera and influenza. Wine, quinine, and stimulating remedies, were required earlier in disease, and in a much larger proportion of cases than formerly. Ague was much more frequent, and occurred in places where formerly it was scarcely known.

Mr. TRUSTRAM (Tunbridge Wells) considered that exudations had of late been much more frequent from the mucous than from serous surfaces. He mentioned the frequent occurrence of diphtherite; and stated that, in a Sussex parish, there had been, within twelve months, 100 deaths in a population of 2,000; a great number of these arising from a very fatal affection of the throat, which he believed to be what was formerly known as cynanche pharyngea, and was characterised by very copious fibrinous exudation.

Mr. WALLIS (Hartfield) considered that this malignant sore throat was connected with the poison of scarlatina.

Mr. REID mentioned that, according to his observation, the nervous element had of late years predominated in disease to a much greater extent than formerly: hence greater debility and earlier exhaustion, and the necessity for a more stimulating treatment.

Dr. CARPENTER (Croydon) stated that, of late, the remarkably feeble type of disease which had so long prevailed was passing away, and disease in his neighbourhood partook more of a sthenic character. He considered that bad water and insufficient drainage were to a great extent causes of the very low form of disease which had so long prevailed.

Mr. TURNER (Tunbridge Wells) and Mr. HUNT (London) moved the thanks of the meeting to the gentlemen who had brought forward communications.

After a vote of thanks to the Chairman, the meeting adjourned, and reassembled to partake of an excellent dinner, which was provided at the White Hart Hotel. The Chairman was supported by the Rev. James Cecil Wynter, Rector of Gatton and Rural Dean; the Rev. F. Owston, Incumbent of Pirbright; and other non-professional friends; and a most agreeable evening was passed.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 26TH, 1857.

SIR C. LOCOCK, Bart., President, in the Chair.

THE INFLUENCE OF THE LABOUR OF THE TREADWHEEL OVER RESPIRATION AND PULSATION; AND ITS RELATION TO THE WASTE OF THE SYSTEM, AND THE DIETARY OF THE PRISONERS. BY EDWARD SMITH, M.D., LL.B.

THIS investigation was part of a series of inquiries which the author had prosecuted, and which had been presented to the Royal Society. The aim was to show how great is the wear of system caused by this mode of punishment, the inequality of the punishment, and the serious defect in the quantity of respiratory food supplied to the prisoners. The inquiries were made by the author on his own person in October, 1856, at the Coldbath-fields prison, by the courtesy of Mr. Pownall and other Middlesex magistrates. He worked the wheel during periods of a quarter of an hour each, with intervening periods of rest of a quarter of an hour, in the manner prescribed for the prisoners, and made seven series of observations. The average quantity of air breathed during the labour was 2500 cubic inches per minute, at a rate of respiration of 25¼ per minute, and a depth of respiration varying from 91¼ cubic inches to 107¼ cubic inches. The rate of pulsation varied from 150 to 172 per minute. During the intervals of rest he sat quietly, and after 13 minutes rest the rate of respiration varied from 15 to 18¼ per minute, the quantity of air respired from 725 cubic inches to 980 cubic inches, the depth from 48 cubic inches to 53 cubic inches, and the rate of pulsation from 97 to 120 per minute. Before he entered upon the inquiry, he breathed in the standing posture about 600 cubic inches per minute, at a rate of 14 per minute, and a depth of 43 cubic inches, and the rate of pulsation was 75 per minute. Thus, during the exertion the quantity of air inspired was increased more that fourfold, the rate of respiration was increased two thirds, the depth of inspiration 2½ times, and the rate of pulsation 2¼ times. The returns during the period of rest show that the effects of the labour had not passed away in a quarter of an hour. Compared with the results in the quiet sitting posture, the author stated that the effect on the respiration was 5½ times, and on pulsation 2¼ times as great; and taking together the 3¾ hours of hard labour with a similar period of rest, he proved that the effect upon the system of the 8 hours labour was equal to that of 24 hours of those not condemned to hard labour; and that if the whole 24 hours were taken together, the effect would probably be two-thirds greater than that of occupations not laborious. He then contrasted those results with others which he had obtained for the purposes of comparison. Thus, fast walking, at upwards of four miles per hour, caused a respiration of 30 per minute, a depth of 80 cubic inches, and a total quantity per minute of 2400 cubic inches. The rate of pulsation was 130 per minute. Ascending steps at the rate of speed of the treadwheel—viz., 640 yards per hour, caused the rate of respiration to be 22 per minute, the depth 90 cubic inches, and total quantity per minute 1986 cubic inches, and a rate of pulsation of 114 per minute. Carrying 118 pounds at the rate of three miles per hour induced a rate of respiration of 24½ times per minute, a depth of 90 cubic inches, and a total quantity of 2141 cubic inches per minute, with a rate of pulsation of 189 per minute. Thus the labour of the treadwheel produces greater effect upon the respiration than any of those modes of exertion, while the effect upon pulsation was greater in the last severe labour only. The total quantity of air breathed per hour upon the treadwheel (if the labour were continuous) would be 150,000 cubic inches as opposed to 27,000 cubic inches in the quiet sitting posture; and the wear of the system would, upon the known principles of science, be in a somewhat similar proportion. He then proceeded to consider the effect of this exertion upon the system, and showed that the excessive exercise of the lungs and heart must ultimately lead to phthisis, asthma, emphysema, congestion of various organs, and disease of the heart; and that in persons with diminished vital capacity of the lungs, and weak hearts, the effect must sooner be very serious. In reference to food, he was of opinion that the reparative (nitrogenous) food, as flesh and bread, was ample, and required revision only in the better distribution of it—as, for example, the removal of 2 oz. or 3 oz. of the 6 oz. of cooked meat, allowed at the dinner four times per week, to the breakfast, which consists only of bread and cocoa. He also pointed out the importance (and especially to those who masticate imperfectly) of rendering the meat tender, and of allowing more time between the meal and the return to the hard labour. The great and most serious defect which he pointed out was in the respiratory food, since neither fat nor sugar is allowed except in combination, as in the ox-heads, or in the briskets of beef, and in the milk and cocoa. No sugar, lard, suet, bacon, or butter are allowed, and of course beer and alcoholic liquors are excluded; these, with starch, are almost the sole articles of respiratory food. He dwelt upon the imperative necessity for an increase of fat, both in relation to the wants of respiration, and to the due digestion of starchy food; and showed that, under the present system, much food must be wasted from non-digestion, and the system must, and often does, decrease in weight. He then explained the mode of working the wheel, and showed that the labour is not only in moving the body as the wheel descends, but in maintaining it erect in opposition to gravity, since the centre of gravity is probably external to and in front of the body. He proved that it is an uneven punishment, the inequality not being that of guilt, but of physical conformation and health; and, moreover, that the resistance offered by the wheel is not uniform in various prisons, and has been lessened at the Coldbath-fields prison; and hence, that the lives of the prisoners are at the mercy of uneducated engineers. He showed that the old, the tall, the feeble, those having unsound teeth, and diseased lungs and heart, those not accustomed to climbing or slow walking, and those with small bones and muscles of the back and upper extremities, must suffer the most; and hence that the punishment falls with different degrees of severity upon different classes of the community. He also pointed out the fact that weak hearts and lessened vital capacity of the lungs may

exist with a fair amount of health, and hence would not be necessarily known to the prisoner, nor, indeed, to the surgeon, except on a minute examination. He was of opinion that it was a punishment unfit for the age (as the discontinuance of it in many prisons also implied), and certain, if long continued, to induce disease and a premature death; and not only rendered the prisoner a greater cost to the community whilst in prison, by reason of the increased quantity of food which the labour demands, but subsequently from a premature old age; and since the labour is not employed to meet the cost of maintenance of those who furnish the power, it is so much of human flesh and life wasted. In a postscript he referred to the Government dietary for prisoners condemned for short periods, and showed that a system which affords only bread and water, or bread and gruel, for the whole diet, must be calculated to injure the health of the prisoners, a system far more repulsive than the private whippings which have been proposed and opposed.

Dr. Webster dissented from the conclusions of the author respecting the effect of the treadmill on the health of the prisoners. Persons of weak health, he said, were often benefited by the prison discipline, and the mortality in most of the London prisons was exceedingly low. The total deaths in all the London gaols during last year amounted to 81, which was a small mortality, considering there were always upwards of 6000 inmates within these receptables, of whom a large proportion were males: while, as frequent changes of prisoners also occurred, the aggregate numbers have been much augmented. The diet, too, of the prisoners was often much better than they were accustomed to when out of prison, with the exception of those who were imprisoned for seven days, and whose fare was only bread and water. Some of the injurious results attendant upon prison life were merely the moral effects of confinement; while others were attributable to the improper method of heating the prisons with warm air.

Dr. Snow said the author ought not to take for granted that the quantity of oxygen consumed always bore a definite proportion to the quantity inspired. Under the circumstances mentioned by Dr. Smith there would doubtless be some increased consumption; but under other circumstances (as after the use of narcotics), the reverse might be the case. Nor was it certain that an increase in the respiratory elements of food was required by the prisoners so much as an increase in that which would furnish muscular tissue, such as mutton and beef, especially the latter, which was consumed in large quantities by navigators.

Dr. Markham thought it would have been better if the practical results, as shown by the reports of the medical officers, had been laid before the members, rather than the theoretical conclusions of the author.

Mr. Spencer Wells referred to a statement made by Captain Chesterton, in his *Revelations of Prison Life*, that the health of the prisoners, when the treadmill was first brought into use by Mr. Cubitt, suffered from the period of labour being too protracted, but that since the period of toil had been shortened the work proved beneficial to the system; and this was the general opinion of those who had opportunities of judging. The punishment, in military prisons, of lifting shot was also found to benefit the men, if not carried to excess.

Dr. Webster said the prisoners often worked in a close atmosphere, which was, of course, prejudical to health.

Dr. Stewart said there could be no doubt that after a short training the labour at the treadmill, like all others, would become less severe; so that the effects produced on the author, who was not accustomed to the exercise, could not be regarded as applicable to all persons.

Dr. O'Connor said he was informed by the governor of one of the Dublin prisons, that the work was beneficial to the prisoners, their health generally improving under the exercise when of short duration. He agreed with Dr. Webster, that moral causes, rather than the actual prison dicipline, would act as promoters of disease.

Dr. Smith, in reply, referred to the reprobation of the treadmill by Mr. Mayhew, in his *Great World of London*, and by Mr. Reade in *It is Never too Late to Mend*. The discontinuance of its use in prisons was a tacit condemnation. Dr. Webster had mixed up prisoners condemned and not condemned to hard labour. As the increased respiration was from natural causes, there would be a corresponding increase in the chemical changes. He described the "shot drill," and showed that it was less laborious than the treadwheel, although it was quite as irksome. The after effects of the treadwheel could seldom be traced, from the short duration of the punishment; but new inquiries in that direction are needed. The results which he (Dr. Smith) had mentioned were subject to some deduction for want of training, though he was strong and healthy, accustomed to long walking, and experienced in the use of the spirometer, and many persons would be less capable of bearing the fatigue than himself.

HARVEIAN SOCIETY.

Thursday, June 18th, 1857.

A. Ure, Esq., President, in the Chair.

CASE OF SUDDEN DEATH FROM PLEURITIC AND PERICARDIAL DROPSICAL EFFUSION (SCARLATINA?): RELATION OF DROPSY TO SCARLATINA. BY GRAILY HEWITT, M.D.

The case was that of a girl, aged 4, previously healthy, residing in rooms over a stable, who was seized on May 20th with feverishness, heat of skin, etc. The mother administered jalap, which acted freely. In the evening, the symptoms were relieved. In the night of May 20th, the child was feverish; and frequent micturition was noticed. There was no sore throat nor difficulty of swallowing, and no rash was seen on the skin. On the morning of the second day, the fever had lessened, and the breathing was found to be a little quick; but the patient was well enough to go out and play, and ate her food well. Frequency of micturition continued. The night of the second day, she was worse, very restless, and thirsty. Towards the morning of the third day, the breathing became much oppressed; between 5 and 8 o'clock, A.M., she was sick twice, the dyspnœa progressively increasing. At 9 o'clock, she was "gasping for breath", but was quite conscious. She was taken to a hospital for relief, and expired on the road home, at half-past 9, the third day of her illness. She was seen by Dr. Hewitt, for the first time, a few minutes after she had ceased to breathe.

Post Mortem Examination. There was no anasarca. The pia mater was a little congested; the amount of serum in the lateral ventricles was slight. The thymus gland was larger than usual; its reservoir was distended. The heart was empty, pale, and flaccid. The pericardium contained half an ounce of serosity. The pleural cavities each contained about four ounces of a similar fluid. The lungs were for the most part healthy; the bronchial tubes were congested. The liver was congested. The kidneys were also congested; the cortical substance was pale. No urine was found in the bladder. The other organs were quite healthy.

The author was of opinion that the cause of death was the effusion into the thoracic cavities; and that this effusion had probably been poured out only a few hours before the fatal event took place. He next proceeded to discuss the question as to the cause of the dropsy in this case. He considered this to be an example of acute consecutive dropsy, following on a state of the blood induced by the reception of the poison of scarlatina; this being one of those exceptional cases in which the dropsy occurs soon after the commencement of the fever, instead of at a later period. The child had had measles, but not scarlatina; and, although it was not proved that the latter disease was present in the immediate neighbourhood, yet the neighbourhood was one frequently infected by it and diseases of an allied character. Cases recorded by Dr. Miller, and the opinions of Drs. Copland and Willshire, were cited as favouring the supposition that the dropsy of scarlet fever may be a part of the disease itself—a result of the action of the poison on the blood. He considered that recorded facts were only to be reconciled on this theory, although in many cases, undoubtedly, the dropsy did appear to depend on a state of the kidneys analogous to that which occurs in Bright's disease. The difference between a case of scarlatina with dropsy and no actual disease of the kidney, and one of Bright's disease with dropsy, was the following: in the one case, the blood was not in a condition to allow of the necessary separation of the urea from it; in the other, the kidneys themselves were at fault. These two conditions doubtless react on and increase each other in many cases. The dropsy was vicarious to a certain extent of the rash.

Sudden effusion into the great thoracic cavities, and leading to a fatal result, is in children a somewhat rare occurrence; and it is still more rare that dropsy of this character sets in at so early a period of the disease (supposing this to have been a case of scarlatina) as in the instance above mentioned.

ELECTION OF TREASURER.

Henry W. Fuller, M.D., was appointed Treasurer to the Society, in the room of Joseph Ridge, M.D., resigned. Dr. Ridge was at the same time elected an honorary member.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, JUNE 1ST, 1857.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

THE MORTALITY FROM ERUPTIVE FEVERS AT DIFFERENT PERIODS OF THE YEAR. BY J. W. TRIPE, M.D.

THIS communication was stated by the author to be merely a basis upon which he purposed to institute a general inquiry into the history of epidemic diseases.

The main results of the paper were as follow. 1. *Small-pox* presented two periods of depressed and two of elevated mortality. The first period of elevation occurred in January, and the second at the end of May and early in June: the former being the highest. The first period of depression was at the end of March or early in April, and the second in September: the latter being the lowest. Therefore, small-pox was most fatal in winter, next in summer, and least fatal in spring. 2. A series of cold springs was attended with comparatively a large mortality: the period of highest mortality coincided with a temperature of less than 40° F., and the lowest with one of above 46° F. 3. The average highest mortality in the seventeen corresponding weeks of 1840-56 was more than double the average lowest mortality. 4. *Measles* had only one period of highest and one of lowest mortality: the former occurring in December, and the latter varying in different years; but the rate of death in spring was much smaller than in any other quarter. 5. The rate of death was greater in the series of spring and winter quarters, which were below the average temperature, than in those which were above it. 6. As in small-pox, the average highest mortality during seventeen corresponding weeks in 1840-56 was double the average lowest mortality. 7. *Scarlet fever* presented one period of highest and one of lowest rate of death, and this more markedly than either small-pox or measles: the greatest number of deaths occurring at the end of October or beginning of November, the lowest at the middle or end of March or beginning of April. 8. The average mortality was higher in warm springs than in cold. 9. The mean of the greatest number of deaths in seventeen corresponding weeks of 1840-56 was about twice and four-fifths as large as the mean of the lowest number of deaths in seventeen corresponding weeks of these years. 10. Although *fever* was more rife from the thirty-sixth to the fifty-first week, yet there was not any particular short period at which it could be said to reach its culminating point. 11. The greatest rate of death occurred in autumn and the smallest in spring; the difference between them being less than in the other eruptive fever. 12. The average maximum number of deaths in seventeen corresponding weeks of the years 1840-56, was not much more than one and a half that of the minimum. 13. The period of greatest mortality from *diarrhœa* was very definitely marked, occupying a period of about seven weeks (from the thirty-first to the thirty-seventh), during which more than two-fifths of the annual mortality takes place; the greatest rate of death extending from the last weeks of July to the first weeks in September. 14. This period corresponded with a mean weekly temperature of 60°.5 or above.

Editor's Letter Box.

HYDROCELE: EFFUSION OF SERUM INTO THE CELLULAR TISSUE.

LETTER FROM J. G. DAVEY, M.D.

SIR,—The perusal, in our JOURNAL of June 20th, of the case related by Mr. Walter, of "Hydrocele of the Tunica Vaginalis, with Effusion of Serum into the Cellular Tissue of the Scrotum and Penis" (the latter a consequence of a blow on the distended scrotum), brought to my mind a very interesting example of hydrocele, of an enormous size, which came under my care at Colombo (Ceylon), about eight years since. The patient, a Cingalese, called one morning at the Colombo General Dispensary, when I happened to be present. He exhibited to view a hydrocele hardly smaller than the body of a robust child. It reached far below the knees, its diameter being so great as to interfere very materially with progression. I introduced a trocar and canula, and allowed about a wash-hand basinful of serous fluid to escape. My intention was to remove the whole of the contents of the sac by instalments. I saw the man again after a few days, and repeated the operation. On the next occasion of my being at the Dispensary, I was asked to call on this patient with the hydrocele, as he was unable to leave his room. I found him suffering from a violent inflammation of the scrotum, and of the parts contiguous. The scrotum was greatly swollen; in fact, it had resumed a size hardly if at all less than that it presented on my first seeing the case, *i. e.*, *before* the first introduction of the trocar and canula. It was hot, excessively painful, and every where "hard and indurated". My first impression was, that I had wounded some vessel, and had so converted what had been a simple hydrocele into an affection vastly more formidable, viz., hæmatocele. This proved a mere surmise on my part. Like Mr. Walter, I concluded that, in my case, the serum which had been contained in the cavity of the tunica vaginalis had, from some cause, become infiltrated into the cellular tissue beneath the skin of the scrotum, etc.; and that this infiltration had resulted in a violent inflammatory condition of the parts concerned.

The treatment adopted was not "a free and long incision"; the enormous length and breadth of the diseased mass (scrotum) seemed not to justify this. I preferred to make many and deep punctures, not with a common scalpel, but with a large double edged knife, into the scrotum; and these I repeated on succeeding visits, for some days, or until the very acute character of the local disorder declined. Warm poppy fomentations were used freely, and with much relief to the pain and tension. The febrile symptoms ran high, and were met by appropriate internal remedies, as castor oil, effervescing mixture, and nitrate of potash; to the latter quinine was afterwards added. The good effect of the several means employed became apparent in the gradual decline of the inflammation, as well as in the subsidence of the constitutional (sympathetic) disorder. Subsequently, for the removal of the interstitial deposition, thickening of structure, etc., which were left behind, the tincture of iodine, nitrate of silver, etc., were employed locally, with very satisfactory results; even the hydrocele was cured.

I am disposed to believe that, without the many and deep punctures, not only would the scrotum, in great part, have sloughed away, but that my patient's life would have been greatly endangered.

I have known but of two other cases like the one recorded by Mr. Walter (see BRITISH MEDICAL JOURNAL, p. 524), and the preceding, occurring in my own practice; and, unless I am greatly mistaken, both of these terminated in a general sloughing of the scrotum. One patient died.

Like Mr. Walter's case, my own will, I take it, be considered of much interest, not only on account of its complicated nature, but also on account of the speedy and permanent relief which a simple operation afforded.

I should perhaps add, that, when under treatment for the hydrocele and effusion of serum, etc., my patient was attacked with a severe dysentery, which of itself was very nearly proving fatal; it yielded, however, to the free administration of opium with ipecacuanha, to which nitrate of silver was subsequently added.

I am, etc., J. G. DAVEY.

Northwoods, near Bristol, June 24th, 1857.

THE UNIVERSITY OF ST. ANDREW'S AND ITS MEDICAL DEGREES.

SIR,—May I offer a few comments on a letter from "M.D., St. Andrew's," in your JOURNAL of June 20th?

I agree with him as to the "difference between St. Andrew's now and St. Andrew's fifty years ago", and as to the respectability of its "published examinations"; but it does not necessarily follow that these attest "the respectability and practical value of its degrees." There is, notwithstanding, a something wanting to assure the profession on these points. St. Andrew's seems to differ from the other Scotch Universities, chiefly in making no distinction between Universities and other medical schools. To this we cannot offer much objection, so long as the example of the English and Irish Universities can be pointed to. Indeed, Oxford is now setting to all Universities the bright example of offering a degree in Arts to all who can pass the examination, without regard to the place or the mode of education, not even requiring the candidate to come to Oxford. Here the principle, not merely of a University education, but even of a curriculum, is abandoned; and, so long as the examination is thorough, there is no reason why it should not be so with regard to those departments of knowledge in which

the student requires the help of books only. Were it not that medicine can be studied only in and about hospitals and dissecting rooms, a curriculum might be abandoned here too, leaving the examination as the only and true test. Indeed, it is now so; for compliance with the curriculum does not imply more than payment of the lecturer's fee, and bodily presence at a certain number of his good, bad, or indifferent lectures. The examination being the true test, how are we to know whether it has been thoroughly applied; how, in short, is the profession to have confidence in the degree of this or that University? The publication of the examination *questions*, merely, goes for nothing. It is easy to put grand questions, and as easy to take bad answers. Why do they not publish the *answers* as well as the questions? It is not enough that the famous University of St. Andrew's has awarded the degree. We want to know *who* St. Andrew's is,—with whom the responsibility of awarding the degree rests,—why the names of the examiners are not made public as well as the names of the graduates. No wonder that, as your correspondent says, "it was found necessary for Mr. Ellice to ask Mr. Cowper whether he had asserted that degrees were granted at St. Andrew's without examination." We know that in the other Scotch Universities the professors are always the examiners too; but St. Andrew's has only one medical professor, with whose name the profession is familiar. Why not make known the names of the examiners in the other departments? For the examination papers profess to include anatomy, physiology, materia medica, midwifery, etc., as well as medicine. I saw lately the announcement of the addition of Dr. Gairdner, of Edinburgh, to the Board. If the other members of the examining Board are men of mark, like him, why not publish their names to the profession? It would afford double security in the degree; for the examiners would be held responsible for the character of the degree, and their reputation bound up with it. It would not then be necessary to make a show by the publication of the questions.

I have no wish to cast discredit on the St. Andrew's graduates. On the contrary, they will agree with me that their *Alma mater* does not do them justice in this matter in the eye of the profession. Nor am I one of those who think more or less of a man according to the degree he is decked with, any more than the hat he wears. Yet there are certain shops where one is sure to get a good hat, and others where we are in doubt. No simile, Mr. Editor, will bear to be pushed too far; for a man cannot well do without a hat, but may do very well without a degree! I am, etc., M.R.C.S.

June 29th, 1857.

THE UNIVERSITY OF ST. ANDREW'S AND ITS MEDICAL DEGREES.

Letter from William Webb, M.D.

Sir,—Your very truthful remarks upon the Medical Examinations at St. Andrew's, in the Journal of June 27, were very gratifying to me, as they would be to hundreds of the graduates of that ancient University; and I am sure you will receive, at the hands of those gentlemen, and eventually at the hands of the entire profession of medicine, the most cordial thanks for the zealous and yet impartial manner in which you have advocated the claims of this much-abused University to professional and public confidence. One would have thought, sir, that the well-known and undoubted probity of such men as Day, Anderson, etc., and the very practical manner in which the examinations for the degree of M.D. at St. Andrew's are conducted (as seen by the papers published periodically in the Medical Journals), would have been sufficient to dispel, at least from within our ranks, any notions or opinions (which those persons acquainted with the working of St. Andrew's of old might, with much justice, have formed) as to imperfection and laxity in the test for the degree of Doctor of Medicine. But how frequently do we hear it said by medical men, when speaking of their brethren the St. Andrew's graduates, "Oh! he has a Scotch degree, obtained without examination or without any trial of merit;" meaning to imply, that it is a degree bought with money, and not by the diligent and careful study of disease. But, sir, you have spoken out upon this point from your own personal experience, and hundreds are ready to endorse your testimony, that no man, who is not well and practically informed in his profession, can come forth from the portals of St. Andrew's as a Doctor of Medicine.

You have mentioned that at the next examination a system of competition for honours will be introduced. This is a most desirable addition, and one which the graduates will heartily welcome. But it appears to me, in thus approximating more nearly to the University of London, that the mode of arrangement into two divisions, adopted by this University, of the candidates who have passed (those placed in the first of which only to be allowed to compete for honours), would save the examiners much unnecessary trouble. But all these matters, and any others which have for their object the elevation of our *Alma mater* as a Medical University, may safely be left to the esteemed Chandos Professor of Medicine.

I am, etc. William Webb.

Wirksworth, Derbyshire, July 2nd, 1857.

THE LONDON PHARMACOPŒIA.

Sir,—A young lady lately requested of me a prescription for a troublesome tickling cough. The following is given to her.

℞ Troch. morph. et ipecac. ʒij. Sumantur viij usque ad xij quotidie, urgente tussi.

To my astonishment, it is returned, the druggist in plea urging that it is not in the *Pharmacopœia*. Thus, while brandy caudle, *aliàs* mistura vini gallici, is directed by the compilers of the London *Pharmacopœia*—a thing which may very well be left to the nurses—the above invaluable troches are excluded. Why? And what am I to do, not knowing of any substitute for them? I am, etc., A Member.

Barnsley, June 29th, 1857.

CLASSIFICATION OF MENTAL DISEASES: CLAIM OF PRIORITY.

Letter from Daniel Noble, M.D.

Dr. Noble presents his compliments to the Editor of the British Medical Journal, and will feel obliged by his publication of the subjoined correspondence.

Manchester, July 4th, 1857.

I. *Letter from Dr. Noble to Dr. C. Lockhart Robertson.*

"Manchester, July 2nd, 1857.

"Dear Sir,—In looking over your Review of the Progress of Psychological Medicine, in the volume just issued of Ranking's *Half-yearly Abstract*, I have noticed that you refer to a classification of cases of insanity in the categories emotional, notional, and intelligential, as one that is offered by Dr. Monro; and that you do not so much as mention myself, its real author. I am the more surprised at this proceeding on your part, as Dr. Monro himself, in the very papers you cite, does me more than justice, not only *adopting* the classification as from myself, but giving to it a measure of commendation which I should not have ventured to claim.

"My division of cases of insanity was instituted to facilitate instructional exposition, and it arose logically out of certain views of cerebral physiology which I had worked out for myself—views which pervade the whole of my *Elements of Psychological Medicine*, an acquaintance with which you evince by having placed it first on the list of works with which your article is headed.

"I cannot doubt that you have acted in this matter simply from want of thought; and I feel confident that, when the error is pointed out, you will be anxious to repair it. Under such circumstances, I must request permission to use whatever answer you make to this communication in any way that I may deem just to myself.

"I am, dear sir, yours very truly,

"Daniel Noble.

"C. Lockhart Robertson, Esq., M.B.Cantab., 1, Charles Street, Berkeley Square, London."

II. *Letter from Dr. C. Lockhart Robertson to Dr. Noble.*

"1, Charles Street, Berkeley Square, July 3rd.

"Dear Sir,—I much regret the apparent omission of your name in my notice of Dr. Monro's paper, of which you complain. Dr. Monro had so fully admitted your claim, that, being engaged simply in a notice of his papers, it did not strike me to state that you were the author of the division of insanity into emotional, notional, and intelligential, as I should otherwise most fully have done.

"I write hastily, amid a press of letters, the day after our annual meeting; but am anxious not to lose a post in assuring you how far it was from my intention to give to Dr. Monro any honour due to you. "I am, dear sir, yours sincerely,

"C. Lockhart Robertson.

"D. Noble, Esq., M.D., Manchester.

III. *Letter from Dr. Noble to Dr. C. Lockhart Robertson.*

"Manchester, July 4th, 1857.

"MY DEAR SIR,—I should have deemed reclamation, probably, to be unnecessary, had your Retrospect been published in the *Asylum Journal*, the periodical in which Dr. Monro's papers appeared. But, you know, it has but a moderate circulation, and this, too, limited very much to a special class of practitioners; whilst Ranking's *Abstract*, as you are aware, is very generally read by the profession at large. And how many persons, in their compilations, will be guided by statements contained in the latter publication, in which you distinctly affirm that the classification in question has been '*offered* by Dr. Monro'?

"I refer to these things simply as showing that the statement was one which I could not, in justice to myself, have done otherwise than notice. But I am bound to thank you for the full, courteous, and gentlemanly acknowledgment which you have made; and am, my dear sir, yours sincerely,

"DANIEL NOBLE.

"C. Lockhart Robertson, Esq., M.B.Cantab."

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, July 3rd.

BOARD OF HEALTH.

Mr. PALK asked the Secretary of State for the Home Department whether it was the intention of the Government to bring in any Bill to remedy the defects proved before a select committee of the present Board of Health? The Bill under which the Board of Health was established was passed in 1848. That measure had been condemned over and over again. It had been submitted to the consideration of committees, and various members of the present Administration had attempted to make such modifications and alterations in its provisions as might lead to its adoption as a permanent measure. Those attempts had failed; and, in the session before last, the House, by a large majority, refused to give the right hon. member for Hertford (Mr. Cowper) permission to introduce a permanent measure which he then proposed. The right hon. gentleman succeeded, however, in obtaining the consent of the House to the continuance of the Act then in force, on the specific pledge that, early this session, a Bill should be brought forward to remedy the defects which were admitted to exist in that Act. They had now arrived at a period of the session when it was very doubtful whether such a measure could be introduced with the slightest chance of its being carried this year. The present state of affairs was fraught with great injustice to the towns and districts now under the Board of Health, because they had spent all the money they were authorised to raise without having completed the necessary works for drainage and other purposes. Another aggrieved class were those who had been waiting, year after year, for the promised measure, in order that they might be enabled to adopt those means for the cleansing of particular towns which were rendered necessary by the increase of the population. The only Bill that had been introduced on this subject was one which the right hon. Home Secretary had been so successful in carrying through a second reading, that he had totally forgotten to explain its nature. That Bill, however, simply rendered permanent all those defects in the existing Act which had been so repeatedly condemned. He wished to ask if the right hon. gentleman would state to the House whether the Government was prepared to carry out the pledge under which they obtained a renewal of this Bill for one year, or whether that pledge was made merely to gain time?

Sir G. GREY said he thought it desirable not to make any statement in anticipation of the discussion which would probably take place at a later period of the evening, when the House went into committee on the General Board of Health Bill; but he might state in reply to the question put to him by the hon. gentleman, that a Bill had been prepared for materially amending the Act of 1848, although he could not admit with the hon. member that that Act was condemned by the select committee.

PETITIONS.

Petitions in favour of Poor-law Medical Reform have been presented from the medical officers of the following unions:—Tynemouth, Havant, Sherborne, Thornbury, Bridge, Oldham, Midhurst, Abingdon, Chippenham, Honiton, Shepton Mallett and Langport, Bolton, Boston, East and West Flagg, Luton, Halstead, Bridgnorth, Croydon, Ticehurst, St. Alban's, Westbury and Whorwelsdown, Uxbridge, Axminster, Atcham, Manchester, Barrow-upon-Soar, Bourne, Towcester, Banbury, Coventry, Williton, Langport, Eastbourne, Swansea, Lutterworth, Wisbech, Daventry, Watford, Great Yarmouth, Liskeard, Totnes, New Alresford, Plomesgate, Barnstaple, Crediton; also from twenty-eight other unions; from the President, Vice-Presidents, and Council of the Royal College of Surgeons of England; the Master and Wardens of the Society of Apothecaries in London; and from the medical students in Leeds; the South-Eastern Branch; the Yorkshire Branch; ratepayers of Walkem Parish; medical officers in Alton; and the medical students of St. George's Hospital.

Petitions for the abolition of the Compulsory Vaccination Act have been presented from Sunderland, Northampton, Cork, Derby, and from Dr. Reed, practitioner of homœopathic medicine; also from Darton, Birthwaite, Dunstable, Liverpool, and Jersey.

A petition has been presented from Dr. Bayard, a French physician, "who, having learned that it is the intention of Parliament to institute an inquiry into the efficacy of vaccination, states that he has had great experience, distrusts and condemns its use, and places his experience at the service of the Committee."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

BLETCHLY. On July 2nd, at 7, Commercial Place, Finsbury Square, the wife of Edward Bletchly, Esq., Surgeon, of a son.

BROWN. On July 5th, at 7, Hans Place, Sloane Street, the wife of Charles Gage Brown, M.D., of a daughter.

PICKSTOCK. On July 1st, at Paignton, near Torquay, the wife of G. N. Pickstock, M.D., of a son.

MARRIAGES.

BEGLEY—MALYN. *BEGLEY, W. C., M.D., of Hanwell, to Jane, widow of the late John Malyn, Esq., of James Street, Buckingham Gate, at Wandsworth, on July 4th.

BENGOUGH—COX. BENGOUGH, the Rev. S. E., B.A., to Julia Mary, youngest daughter of the late J. C. Cox, M.D., of Fishponds, near Bristol, at Bishop's Hull, near Taunton, on July 2nd.

BODY—MAY. BODY, Bernard Richard, Esq., of Reading, to Emily, eldest daughter of *George May, Esq., Surgeon, of the same place, on July 7th.

CUMMING—SPURGIN. CUMMING, Henry, Esq., of Exeter, to Sarah Olivia, daughter of John Spurgin, M.D., of Great Cumberland Street, Hyde Park, at St. Mary's, Bryanstone Square, on July 2nd.

ELPHICK—WARDELL. ELPHICK, William, Esq., Surgeon, to Mary Adamson, youngest daughter of the late Thomas Wardell, Esq., of Poplar, at Poplar, on July 1st.

FOULIS—STEVENSON. FOULIS, Robert, M.D., to Mary, fourth daughter of James Stevenson, Esq., at Edinburgh, on June 30th.

HANSON—HARMAN. HANSON, the Rev. Stephen, M.A., Senior Fellow of Caius and Gonville College, Cambridge, and rector of Weeting, to Catherine, eldest daughter of E. Beversham Harman, M.D., of Pembridge Place, Bayswater, at St. John's, Notting Hill, on July 1st.

HENLY—FINUCANE. HENLY, George A., Esq., of Portsmouth, Purveyor to the Forces, to Lizzie, only daughter of the late Joseph Finucane, M.D., of Kingstown, Dublin, at Monkstown, near Dublin, on July 1st.

TATHAM—DIXON. TATHAM, Robert G., eldest son of Christopher Tatham, Esq., Surgeon, of Newby Place, to Emma Louisa, second surviving daughter of James Dixon, Esq., of East India Road, at All Saints, Poplar, on July 2nd.

DEATHS.

BEALEY, William, M.D., at Bath, aged 76, on June 29th.

BALLINGALL. On July 3rd, at Bath, aged 63, Lady Ballingall, widow of the late Sir George Ballingall, Professor of Military Surgery in the University of Ediburgh.

GILLIES. On June 25th, at Coldstream, Berwickshire, Rebecca Seton, eldest daughter of George Gillies, Esq., Surgeon.

ROPER. On July 4th, at Goswell Road, Islington, Elizabeth, wife of Giles Symonds Roper, Esq., Surgeon.

WAUDBY, Samuel, Esq., Surgeon in the Peninsular and Oriental Company's Service, and late House-Surgeon to the Hereford Infirmary, on board the *Alma*, of intermittent fever, aged 37, on June 15th.

WEST, George, Esq., Surgeon, of Northampton Place, Hackney Road, at Hastings, aged 55, on June 26th.

*WICKENDEN, Joseph, Esq., Surgeon, of Birmingham, aged 62, sudden, of apoplexy, on July 5th.

APPOINTMENTS.

COULSON, William, Esq., re-elected a member of the Council of the Royal College of Surgeons of England. The numbers polled were—*Ayes* 37, *Noes* 9.

*DALY, Owen, M.D., Lecturer on the Practice of Medicine in the Hull and East Riding School of Anatomy, appointed Physician to the Hull General Infirmary, on June 26th, in room of *F. R. Horner, M.D., resigned.

GULLIVER, George, Esq., re-elected a member of the Council of the Royal College of Surgeons of England. The numbers polled were—*Ayes* 40, *Noes* 6.

TATUM, Thomas, Esq., elected a member of the Council of the Royal College of Surgeons of England, in the room of Robert Keate, Esq. The numbers polled were—*Ayes* 38, *Noes* 8.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at the meeting of the Court of Examiners, on Friday, July 3rd, 1857:—

BEACH, Henry John, Cheltenham
BLASSON, William, Billingborough
BURY, George, Mitchelstown, co. Cork
COOPER, Thomas James, Canterbury
EVANS, Maurice Bibby, Glasgoed, near Oswestry
LAWRENCE, Arthur Garnous, Carmarthen
PICKFORD, William Henry, Brighton
THOMPSON, John, Hull
WATSON, William Spencer, Southampton Street, Bloomsbury
WILKES, George, Stepney Green
YARDE, William, Lamb's Conduit Street

APOTHECARIES' HALL. Members admitted on Thursday, July 2nd, 1857:—

CRADDOCK, Samuel, Shepton Mallett
DAY, William Henry, Stratton, near Swindon, Wilts
DRUCE, William, Melbourne, Victoria
FRICKER, Louis Hugh, Southampton
JONES, Richard, Aber Corris, North Wales
SMITH, William John, North Shields

HEALTH OF LONDON:—WEEK ENDING JULY 4TH, 1857.

[From the Registrar-General's Report.]

IN the week that ended on Saturday (July 4th), the total number of deaths registered in London was 1029. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 980. But as the deaths, now returned, occurred in an increased population, it is necessary, with a view to comparison, to raise the average proportionally to the increase, in which case it will become 1078. The deaths registered last week were therefore less by 49 than the average rate of mortality at the beginning of July would have produced.

The deaths arising from zymotic diseases exhibit an increase, chiefly in consequence of increased prevalence of diarrhœa. The deaths from this complaint rose from 33 in the previous week to 65 last week. Of these 65, there were 56 amongst young children, a very large proportion of the cases being amongst children less than a year old. About a third part of the whole number of deaths from diarrhœa occurred in the east districts, though the population of that division is to that of London only in the proportion of about one to five. It is also to be remarked that more deaths from each of the five zymotic diseases—measles, scarlatina, hooping-cough, diarrhœa, and typhus—were returned last week in the east districts, than in any other of the five groups of districts into which London is divided. The number of deaths caused by summer cholera in all the metropolitan districts was five, of which four occurred to infants. The remaining case was that of a coachman, who was attacked on the night of Saturday, after exposure to the great heat of that day, and died after four days illness.

Last week the births of 826 boys and 778 girls, in all 1604 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1422.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·678 in. The mean temperature of the week was 62·4°, which is 1° higher than the average of the same week in 43 years. On Sunday (the 28th ult.), the mean temperature was 73·7°, which is 12·4° above the average; and the highest temperature of that day in the shade was 92·7°, and in the sun 119°. The lowest temperature in the week was 52°, on Friday; and the range of the week was therefore 40·7°. After Sunday, the temperature declined constantly till Friday; and on the last four days the mean daily temperature was below the average. The mean temperature of the water of the Thames was 68·5°. The highest temperature of the river was 72·4°, on Sunday. The wind blew generally from the south-west. The temperature in the shade on Sunday rose to a point higher than any since the 6th July, 1846.

In the last Quarter (which ended 27th June), the deaths in London were 13,252. The rate of mortality was remarkably low; for in the corresponding quarters of the four years 1853-56, when the population was less, the deaths ranged from 14,069 to 15,055. The decrease is most considerable in the deaths from diseases of the zymotic class, which in the spring quarter of 1854 were fatal in 3,686 cases, and in the same months of this year in 2,413 cases, though hooping-cough has lately been extensively fatal to children, and deaths from measles have also been rather numerous. A very striking decrease is perceived in small-pox, which averaged only two deaths a week; also in scarlatina and typhus. Fewer persons than usual died from apoplexy and paralysis, and fewer children from "convulsions". Pneumonia declined; and phthisis, which destroys more lives than any other disease in the catalogue, appears to have reduced its operations within narrower limits. There is also a decrease under rheumatism. Thirty-one persons died from intemperance, which is considerably more than in any of the four corresponding quarters.

TESTIMONIAL TO PROFESSOR SANDS COX. A short time since a numerous meeting of ladies, by permission, was held in the Committee-room of the Queen's Hospital, for the purpose of expressing their sense of Mr. Sands Cox's private worth and public services. Mrs. T. B. Upfill was called to the Chair. It was proposed by Mrs. Colonel Edwards, and seconded by Mrs. W. Norton, "That a subscription be opened to present Mr. Sands Cox with a token of their personal regard, their sense of his private worth, and their estimation of his public services." Mrs. Morris Banks kindly undertook the office of Honorary Secretary, and the list was headed by the Lady Charlotte Law, the Lady Mayoress, and other influential ladies. A handsome sum has been subscribed, and the Committee of Management have purchased an approprite testimonial—viz., an elegant escritoire, of beautiful walnut wood, with chaste silver fittings, and a costly achromatic microscope. A plate at the foot of the instrument bears the following inscription:—

"*Ladies Testimonial.* Presented to William Sands Cox, Esq., F.R.S., the founder of the Queen's College and the Queen's Hospital, at Birmingham, in token of their regard for his private worth, and public services. July 1st, 1857."

This truly graceful tribute of respect is accompanied with an address written on vellum, and inscribed with the names of the subscribers. The subscription to the general testimonial now exceeds £1200 in amount. (*Birmingham Paper.*)

ROYAL HUMANE SOCIETY. At the half-yearly meeting of this Society, held on Wednesday last, one of the honorary silver medals was awarded to Mr. Erasmus Wilson, for saving the life of a woman aged 60, who attempted to drown herself in the Regent's Canal on April 22nd last.

POOR-LAW MEDICAL RELIEF.

Mr. Griffin has addressed the following letter to the Poor-Law Board:—

"12, Royal Terrace, Weymouth, June 29th, 1857.

"MY LORDS AND GENTLEMEN,—As one of your medical officers, I shall feel obliged by your informing me if '*the lame, impotent, old, blind, and such other among them being poor and not able to work,*' are the only persons I am, by virtue of my office, bound to attend; and what course I am to pursue when the relieving officer sends me orders to attend persons not coming under the class above named. I need scarcely remind your honourable Board that your reply is one of vital importance, not only to your medical officers, but to about four millions of the labouring classes, who for a long time past have been attended by orders from the relieving officers.

"The majority of the Union patients I now attend are the wives and children of men in employment, and even men themselves who are in the receipt of wages up to the hour of sickness, and one at this very time actually has ten shillings a week from a club during his illness.

"In the *Justice of the Peace* for June 27th is a leading article on 'Medical Relief to the Poor, and the Poor-law Medical Officers'. In one part of the article is the following:—

"'Perhaps much of the grievances of which the medical officers complain is caused by the too great facility which is afforded to the labouring classes generally to obtain medical aid at the cost of the poor-rates when they, or any members of their families, are sick. Generally speaking, this species of parochial relief is not looked upon by the poor in the same light as direct eleemosynary relief; and, on the other hand, the guardians and their officers, as it is to cost nothing to the parish beyond the salary of the medical officer, too readily grant medical orders. It may be urged that they do so to prevent the whole family becoming paupers by the death of the head of the family; but we think that this is a very short-sighted view of the question. In no case can the poor-rates be lawfully applied by the guardians to prevent a person becoming destitute. It is only when he is actually destitute—that is, destitute of the means of obtaining from his own resources that which he applies to the guardians to be supplied with at the cost of the ratepayers—that he can be relieved; and the principle is the same, whether the application be for medical or any other kind of relief. In either case, the sole question for the consideration of the guardians is the fact of the then destitution of the applicant, and not the likelihood of his becoming destitute if that for which he applies be withheld. Unless the poor—and by that term we mean, not those only who are usually reckoned paupers, but the labourers generally—are made to rely upon their own resources in sickness as well as in health, it is in vain to look for a continuance of the diminished pauperism of the country.

"'In the petition of the Poor-law medical officers, the fifth resolution is, 'That the class of persons entitled to medical relief be defined, and not left to the discretion or caprice of relieving officers.' This, however, we have already disposed of, by showing what class of persons only are entitled to medical relief, namely, the *really destitute poor;* and we do not understand in what way they could be more clearly defined. Perhaps the legislature will be asked to define more particularly than it has already done the class of persons entitled to ordinary relief from the poor-rates—'*the lame, impotent, old, blind, and such other amongst them being poor and not able to work,*' appears to us to be a tolerably clear definition; *and none other are entitled to medical relief at the cost of the poor-rates.*"

"The foregoing quotation, coming as it does from a periodical edited by three barristers-at-law (one of them, W. C. Glen, Esq., well known in connexion with Poor-law), is entitled to grave consideration. That it will have due weight with your honourable Board in giving your decision, I have little doubt. Your medical officers cannot go on attending the labouring classes indiscriminately, as they have hitherto done, unless they are legally bound to do so, or their salaries are increased in the same ratio as their labour.

"I have the honour to be, my lords and gentlemen,

"Your obedient servant, "RICHARD GRIFFIN.

"The Poor-law Board."

KING'S COLLEGE HOSPITAL. A meeting was held on Friday, July 3, in the board-room of the hospital, attended by Earl Howe, Sir Thomas Phillips, and several of the leading members of the council, for the purpose of presenting a testimonial to Mr. J. W. Cunningham, the secretary of the college, who has rendered most important honorary services in the foundation and building of that part of the hospital which at present exists. The testimonial, consisting of Mr. Cunningham's portrait by Richmond, and two handsome silver salvers, was presented by Sir Thomas Phillips, and appropriately acknowledged.

TESTIMONIAL TO A. EMSON, ESQ. At the recent festival of the Dorchester Tradesmen's Benefit Society, a piece of plate was presented to Alfred Emson, Esq., the surgeon of the club, in acknowledgment of the kindness and attention the members had experienced at his hands during the many years he had been their medical adviser. The testimonial consisted of a chaste silver inkstand, including two beautifully cut bottles with silver tops, and bore the following inscription:—"Presented to A. Emson, Esq., by the Members of the Dorchester Tradesmen's Benefit Society, as a mark of respect for his attention as their Surgeon. June 29, 1857." Mr. Emson made a feeling response to the kindness which had thus been shown to him: and the remainder of the evening was spent in a most convivial and pleasant manner.

TESTIMONIAL TO FERGUSON BRANSON, M.D. A handsome silver inkstand was on Thursday, July 2nd, presented to Dr. Branson, of Baslow, on his retirement from practice in Sheffield, by some of his medical brethren in that town, to testify their high estimation of his character, and sincere regret at his departure from amongst them.

TO CORRESPONDENTS.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

A POOR-LAW MEDICAL OFFICER. Your letter on the Single Qualification has been received, but you have not communicated to the Editor your name and address.

MR. A. KEMPE is referred to the JOURNAL for June 27.

Communications have been received from:—DR. G. G. ROGERS; MR. W. I. COX; DR. H. H. VERNON; DR. H. COLLET; DR. H. HANCOX; DR. M. DAVIS; DR. COCKLE; M.R.C.S.; DR. J. G. DAVEY; THE EDITOR OF THE QUARTERLY JOURNAL OF DENTAL SCIENCE; DR. J. M. COLEY; A MEMBER; DR. D. NOBLE; MR. J. A. LOCKING; MR. RICHARD GRIFFIN; MR. H. TERRY, JUN.; DR. W. WEBB; MR. GEORGE MAY, JUN.; DR. KINGSLEY; MR. SOLOMON; MR. A. KEMPE; MR. W. F. FAVELL; MR. S. BERRY; J. R.; and MR. O. PEMBERTON.

ADVERTISEMENTS.

Metropolitan Counties Branch of THE BRITISH MEDICAL ASSOCIATION.—The Fifth Annual General Meeting of this Branch will be held at 37, Soho Square, on Tuesday, July 14th, at 3 P.M.

The Members and their Friends will dine together at the Freemasons' Tavern, Great Queen Street, at Six o'Clock. Tickets for the Dinner, including Dessert and Tea and Coffee, 10s. 6d.

June 25, 1857. T. OGIER WARD, M.D., Hon. Sec.

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The Sanitary Review. Edited by

Dr. RICHARDSON. This Number contains the following Articles:—Sweating Sickness in England. By F. C. Webb, M.D.—Diseased Food and Disease.—Epitome of Sanitary Literature.—Hygiene of the Turkish Army. By J. N. Radcliffe, Esq.—Sanitary Legislation the First Duty of a Government. By B. Daniel, Esq.—Nursery Government in its Sanitary Aspects. By T. H. Barker, M.D.—Sanitary State of Huddersfield. By S. Knaggs, Esq.—Progress of Epidemics in England, communicated by Forty Observers.—Sanitary Legislation.—Transactions of the Epidemiological Society.

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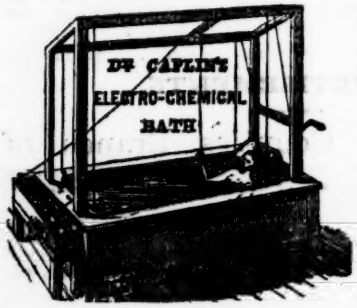

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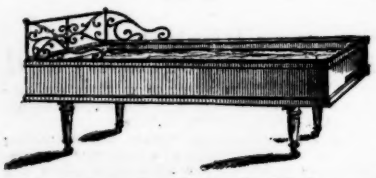

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Made of Solid INDIA RUBBER with PATENT VALVE, and adapted for LADIES, GENTLEMEN, and CHILDREN.

F. WALTERS, 16, MOORGATE STREET, LONDON.

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